HP color LaserJet 5500/5550 Printers

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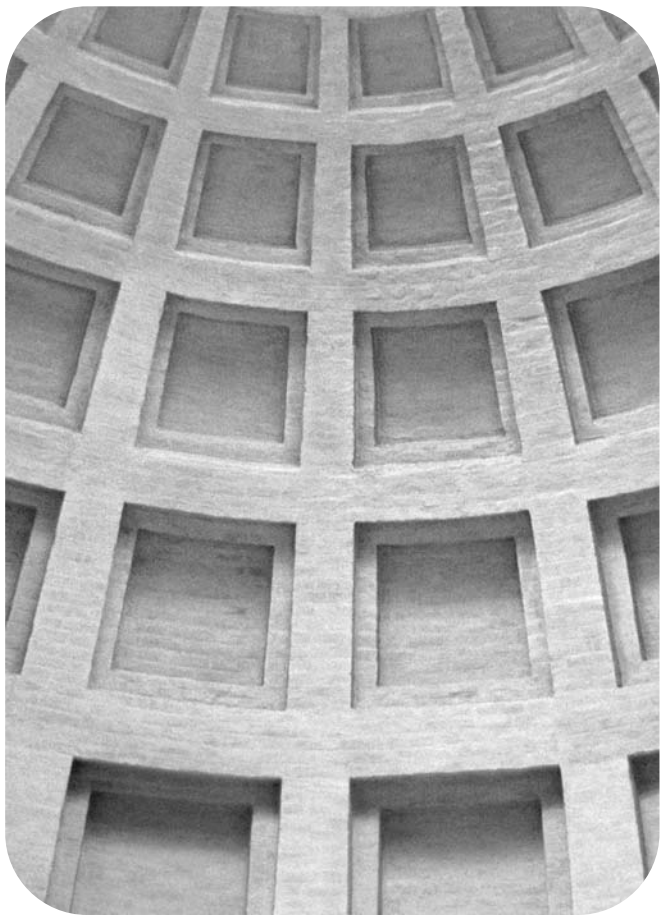
Service



HP Color LaserJet 5500/5550 Printers

Service Manual

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1 Printer description

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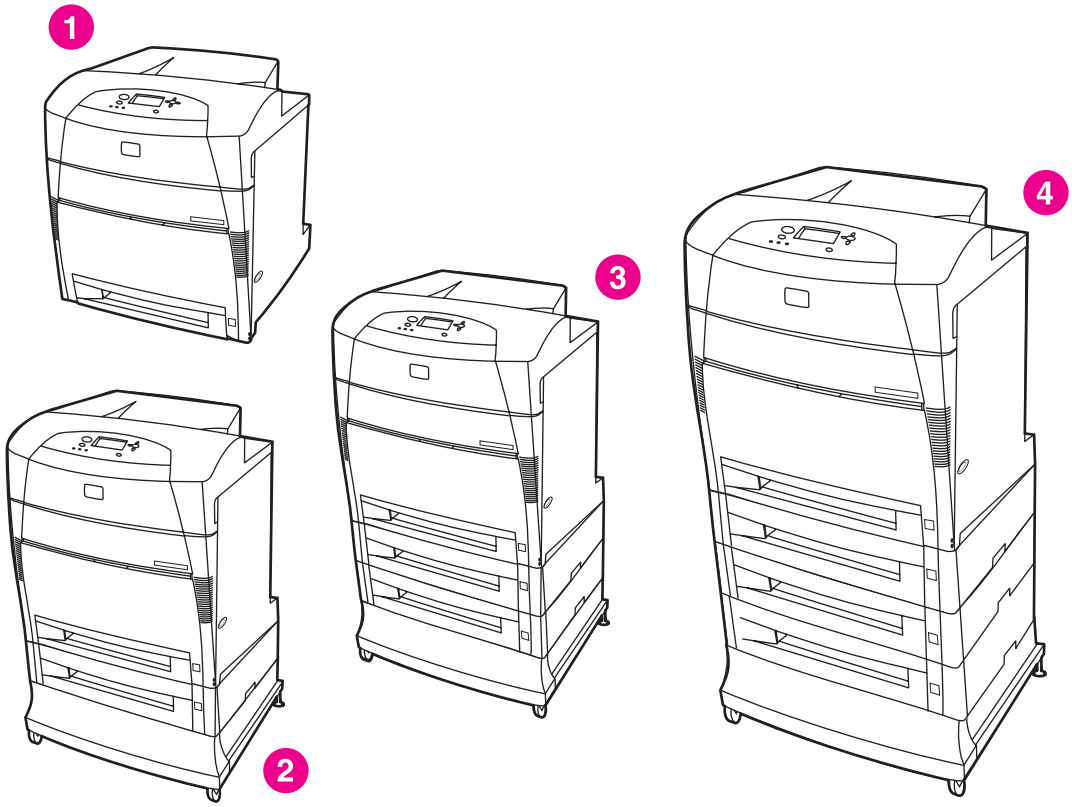
Model Configurations

This printer combines the quality and reliability of Hewlett-Packard printing with the features listed below. For more information on printer features, see the Hewlett-Packard website at http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550.

The HP Color LaserJet 5500 series printer



1 HP Color LaserJet 5500, 5500n, 5550, 5550n, 5500dn, and 5550dn printers
2 HP Color LaserJet 5500dtn and 5550dtn printers
3 HP Color LaserJet 5500hdn printers
4 HP Color LaserJet 5550hdn printer

Table 1-1. Model configurations

HP LaserJet 5500 models	
HP Color LaserJet 5500 printer (model number C9656A)	The HP CLJ 5500 printer is the base model, which includes 96 megabytes (MB) of synchronous dynamic random access memory (SDRAM), one 500-sheet input tray. This model comes with three optional EIO slots, standard bi-directional parallel port (IEEE-1284-C compliant), and a Fast InfraRed (FIR) port.

Table 1-1. Model configurations (continued)

HP Color LaserJet 5500n printer (model number C7131A)	The HP CLJ 5500n printer contains all of the features of the base model plus an HP Jetdirect 615N print server (network card) and is only available in Europe.
HP Color LaserJet 5500dn printer (model number C9657A)	The HP CLJ 5500dn printer contains all of the features of the base model plus an HP Jetdirect 615N print server (network card), and automatic 2-sided printing (duplexing).
HP Color LaserJet 5500dtn printer (model number C9658A)	The HP CLJ 5500dtn printer contains all of the features of the base model plus an HP Jetdirect 615N print server (network card) and automatic 2-sided printing (duplexing), an additional 500-sheet feeder, and 160 MB of SDRAM.
HP Color LaserJet 5500hdn printer (model number C9659A)	The HP CLJ 5500hdn printer contains all of the features of the base model with an HP Jetdirect 615N print server (network card) and automatic 2-sided printing (duplexing), two additional 500-sheet feeders, a hard disk, and 160 MB of SDRAM.
HP LaserJet 5550 models	
HP Color LaserJet 5550 printer (model number Q3713A)	The HP CLJ 5550 printer is the base model, which includes 128 megabytes (MB) of dual-data-rate (DDR) synchronous dynamic random access memory (SDRAM), plus 32 MB of additional memory on the formatter board for a total of 160 MB of memory, and a 500-sheet input tray. The printer provides three enhanced input/output (EIO) slots, wireless connectivity, an auxiliary port, a universal serial bus (USB) connection, and a standard bidirectional parallel cable interface (IEEE-1284-C compliant).
HP Color LaserJet 5550n printer (model number Q3714A)	The HP CLJ 5550n printer contains all of the features of the base model plus an HP Jetdirect 620N print server (network card).
HP Color LaserJet 5550dn printer (model number Q3715A)	The HP CLJ 5550dn printer contains all of the features of the base model plus an HP Jetdirect 620n print server (network card) and automatic 2-sided printing (duplexing).
HP Color LaserJet 5550dtn printer (model number Q3716A)	The HP CLJ 5550dtn printer contains all of the features of the base model plus an HP Jetdirect 620N print server (network card), automatic 2-sided printing (duplexing), an additional 500-sheet feeder. This model has 256 MB of DDR SDRAM, plus 32 MB of additional memory on the formatter board for a total of 288 MB of memory.

Table 1-1. Model configurations (continued)

HP Color LaserJet 5550hdn printer (model number Q3717A)	The HP CLJ 5550hdn printer contains all of the features of the base model plus an HP Jetdirect 620N print server (network card), automatic 2-sided printing (duplexing), and three addtional 500-sheet feeders. This model has 256 MB of DDR SDRAM, plus 32 MB of additional memory on the formatter board for a total of 288 MB of memory.

Performance, memory, and other printer features

This printer series combines the quality and reliability of Hewlett-Packard printers with the features listed in Table 1-2. Features.

Table 1-2. Features

Performance	• HP Color LaserJet 5500 models: Up to 22 pages per minute (ppm) for A4-size paper and up to 21 ppm for letter size paper HP Color LaserJet 5550 models: Up to 28 pages per minute (ppm) on A4 size paper and up to 27 ppm for letter size paper • Also prints on transparencies and glossy paper
Memory	• Memory specifications for HP Color LaserJet 5500 models: specifications for Synchronous Dynamic Random Access Memory (SDRAM), four 168-pin DIMM slots available. Accepts 64 MB, 128 MB, and 256 MB. Only four slots can be used at one time. • Memory specifications for HP Color LaserJet 5550 models: specifications for Dual Data Rate (DDR) SDRAM, 200-pin SODIMM. Accepts 128 MB or 256 MB. Two slots available. • HP Color LaserJet 5500, 5500n, and 5500dn come with standard 96 MB SDRAM. • HP Color LaserJet 5500dtn and 5500hdn come standard with 160 MB SDRAM. • HP Color LaserJet 5550, 5550n, and 5550dn models come with a total of 160 MB memory, which includes 128 MB DDR SDRAM and 32 MB on the formatter board. • HP Color LaserJet 5550dtn and 5550hdn models come with a total of 288 MB memory, which includes 256 MB DDR SDRAM and 32 MB on the formatter board. • HP Color LaserJet 5500hdn and 5550hdn come with a hard drive. For the other printers, an optional hard drive can be added via an EIO slot.
User interface	• Graphic display on control panel • Enhanced Help with animated graphics • Embedded Web server to access support and order supplies (network-connected printers) • HP Toolbox software provides printer status and alerts, configure printer settings, view documentation and troubleshooting information, and print internal printer information pages (for HP Color LaserJet 5550 models only).
Supported printer personalities	• HP PCL 6 • HP PCL 5c • PostScript 3 emulation • Automatic language switching • Direct PDF support (HP Color LaserJet 5550 models only) • XHTML support (HP Color LaserJet 5550 models only)
Storage features	• Job storage (for printers with a hard disk) • Personal identification number (PIN) printing (for printers with hard drives) • Fonts and forms

Table 1-2. Features (continued)

Fonts	• 80 internal fonts available for both PCL and PostScript emulation • 80 printer-matching screen fonts in TrueType™ format available with the software solution • Supports forms and fonts on the hard drive using HP Web Jetadmin.
Paper handling	• Prints on paper from 76 x 127 mm (3 x 5 inches) up to 306 x 470 mm (12.1 x 18.5 inches) • Prints on paper with weights from 60 g/m^2 to 199 g/m^2 (16 to 53 lb bond) • Prints on a wide range of media types including glossy, labels, overhead transparencies, and envelopes • Multiple gloss levels • A 500-sheet paper feeder (Tray 2) that supports paper sizes from 148 x 210 mm (5.8 x 8.3 inches) up to 297 x 432 mm (11.6 x 17 inches). • Optional 500-sheet paper feeders (Trays 3, 4, and 5 (HP Color LaserJet 5550 models only) supports paper sizes from 148 x 210 mm (5.8 x 8.3 inches) up to 297 x 432 mm (11.6 x 17 inches). • Automatic two-sided printing on all HP Color LaserJet 5500dn/5550dn, HP Color LaserJet 5500dtn/5550dtn, and HP Color LaserJet 5500hdn/5550hdn printers • 250-sheet face-down output bin.
Accessories	• Printer hard drive, which provides storage for fonts and macros as well as job storage; standard on HP Color LaserJet 5500hdn and 5550hdn models only • Printer stand (recommended for additional optional trays) • Optional Tray 3 is standard on the HP Color LaserJet 5500dtn and HP Color LaserJet5550dtn models. Optional trays 3 and 4 are standard on the HP Color LaserJet 5500hdn models. Optional Trays 3, 4, and 5 are standard on the HP Color LaserJet 5550hdn models. All optional trays support support paper sizes from 148 x 210 mm (5.8 x 8.3 inches) up to 297 x 432 mm (11.6 x 17 inches). • HP Color LaserJet 5500 models: Fast InfraRed (FIR) pod • HP Color LaserJet 5550 models: Two-200-pin DDR SDRAM slots. One slot is available for adding memory to the printer. DDR SDRAM memory is available in 128 and 256 MB modules • HP Color LaserJet 5500 supports four 168-pin dual inline memory (DIMM) slots and the fifth 100-pin DIMM slot. Memory can be expanded up to 416 MB, which is available in 64MB, 128MB, or 256MB.
Connectivity	• Optional enhanced input/output (EIO) network card; standard on the HP Color LaserJet 5500n/5550n, HP Color LaserJet 5500dn/5550dn, HP Color LaserJet 5500dtn/5550dtn, and HP Color LaserJet 5500hdn/5550hdn printers • HP Color LaserJet 5550 models only: USB 1.1 connection • HP Web Jetadmin software • Standard bidirectional parallel cable interface (IEEE -1284-C compliant) • The HP Color LaserJet 5550 model printer supports an auxiliary connection for paper handling input devices. • HP Color LaserJet 5550 models only: Both USB and parallel connections are supported, but cannot be used at the same time • HP Color LaserJet 5500 model only: Infrared (FIR) connection.

Table 1-2. Features (continued)

Supplies	• Supplies status page contains information on toner level, page count, and estimated pages remaining • No-shake cartridge design • Printer checks for authentic HP print cartridges at cartridge installation • Internet-enabled supply-ordering capabilities (using embedded Web server, printer Status and Alerts, or Toolbox (HP Color LaserJet 5550 models only)

Identification

Model and serial numbers

The model number and serial numbers are listed on identification labels located on the rear of the printer. The model number is alphanumeric, such as C9656A for the HP Color LaserJet 5550. The serial number contains information about the country/region of origin, the printer version, production code, and the production number of the printer.

Figure 1-1. **Model and serial number information**

Power and regulatory information

The identification labels on the rear of the printer also contain power rating and regulatory information as shown in Figure 1-2. Sample label.

CAUTION Converting the voltage on the printer can damage the printer. Do not use any voltage other than the operating voltage. Any attempt to convert operating voltages will void the product warranty (for example, attempting to change a 110V printer to a 220V printer).

Figure 1-2. **Sample label**

Table 1-3. Model names and numbers

Model name	Model number
HP Color LaserJet 5500 HP Color LaserJet 5550	C9656A Q3713A
HP Color LaserJet 5500n HP Color LaserJet 5550n	C7131A Q3714A
HP Color LaserJet 5500dn HP Color LaserJet 5550dn	C9657A Q3715A
HP Color LaserJet 5500dtn HP Color LaserJet 5550dtn	C9658A Q3716A
HP Color LaserJet 5500hdn HP Color LaserJet 5550hdn	C9659A Q3717A

NOTE This manual describes the HP Color LaserJet 5500 series printer which includes the HP Color LaserJet 5500 models *and* the HP Color LaserJet 5550 models.

HP Color LaserJet 5500 models

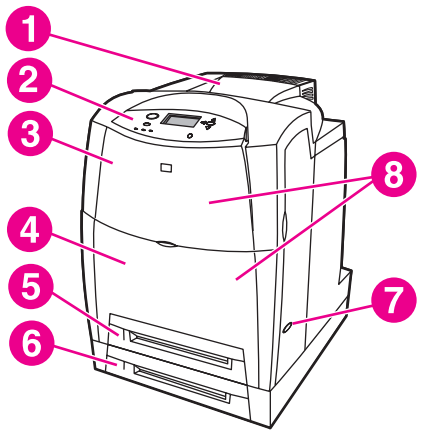


Figure 1-3. **Front view, HP Color LaserJet 5500 models**

1 Output bin
2 Printer control panel
3 Top cover
4 Front cover (includes tray 1)
5 Tray 2 (500-sheet standard tray)
6 Tray 3 (500-sheet paper feeder; optional)
7 On/off switch
8 Access to print cartridges, transfer unit, and fuser

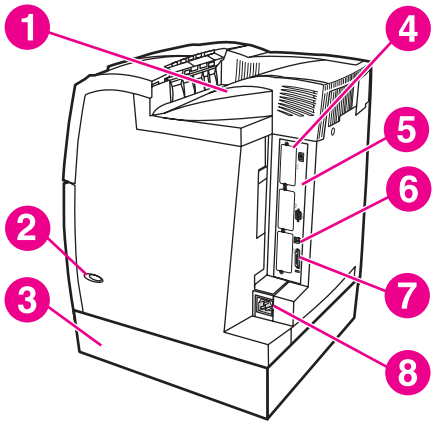


Figure 1-4. **Back view, HP Color LaserJet 5500 models**

1 Output bin
2 On/off switch
3 Tray 3 500-sheet paper feeder (optional)
4 EIO connections (3 total)
5 Memory access
6 Fast InfraRed (FIR) connection
7 Parallel connection
8 Power connection

HP Color LaserJet 5550 models

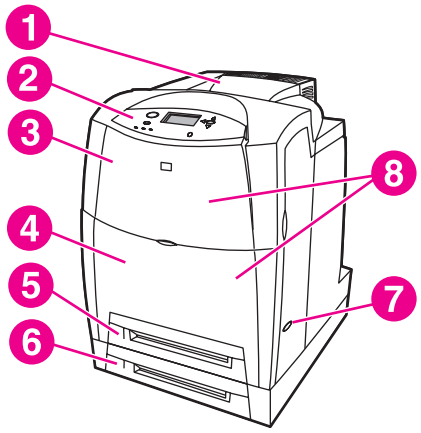


Figure 1-5. **Front view, HP Color LaserJet 5550 models**

1 Output bin
2 Printer control panel
3 Top cover
4 Front cover (includes tray 1)
5 Tray 2 (500-sheet standard tray)
6 Tray 3 (500-sheet paper feeder; optional)
7 On/off switch
8 Access to print cartridges, transfer unit, and fuser

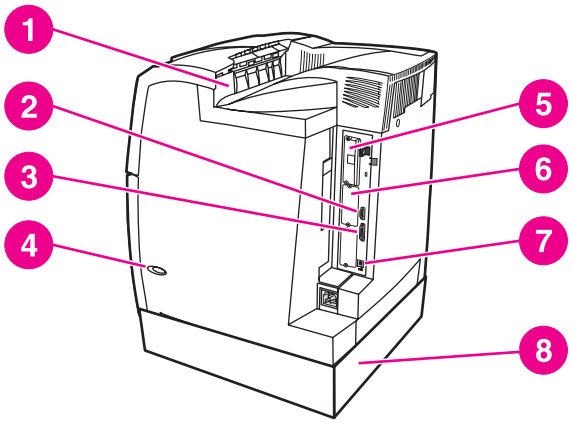


Figure 1-6. **Back view, HP Color LaserJet 5550 models**

1 Output bin
2 Auxiliary connector
3 Parallel connection
4 On/off switch
5 EIO connections (3 total)
6 Memory access
7 1.1 USB connection
8 Tray 3, Tray 4, or Tray 5 (optional)

Printer specifications

Table 1-4. Physical dimensions (HP Color LaserJet 5500 models) and Table 1-5. Physical dimensions (HP Color LaserJet 5550 models) describe the dimensions of the printer.

Maximum duty cycle is 120,000 pages per month.

Table 1-6. Acoustic emissions (HP Color LaserJet 5500 models) and Table 1-7. Acoustic emissions (HP Color LaserJet 5550 models) list the acoustic emissions of the printer when it is printing and when it is in standby mode.

Table 1-4. Physical dimensions (HP Color LaserJet 5500 models)

Product	Height	Depth	Width	Weight
HP Color LaserJet 5500, 5500n, and 5500dn models	640 mm (25.2 in)	704 mm (27.7 in)	577 mm (22.7 in)	60 kg (132 lbs)
HP Color LaserJet 5500 with optional Tray 3 and stand	986 mm (38.8 in)	718 mm (28.25 in)	630 mm (24.8 in)	113 kg (250 lbs)
HP Color LaserJet 5500 with optional Trays 3 and 4 and stand	1119 mm (44 in)	718 mm (28.25 in)	630 mm (24.8 in)	128 kg (283 lbs)

Table 1-5. Physical dimensions (HP Color LaserJet 5550 models)

Product	Height	Depth	Width	Weight
HP Color LaserJet 5550, 5550n, and 5550dn models	640 mm (25.2 in)	704 mm (27.7 in)	577 mm (22.7 in)	60 kg (132 lbs)
HP Color LaserJet 5550 with optional Trays 3 and stand	986 mm (38.8 in)	718 mm (28.25 in)	630 mm (24.8 in)	113 kg (250 lbs)
HP Color LaserJet 5550hdn models with optional Trays 3, 4, and 5 and stand	1237 mm (48.7 in)	718 mm (28.25 in)	630 mm (24.8 in)	144 kg (317 lbs)

Table 1-6. Acoustic emissions (HP Color LaserJet 5500 models)

Sound Power Level[1, 2]	Declared Per ISO 9296

Table 1-6. Acoustic emissions (HP Color LaserJet 5500 models) (continued)

Printing (22 ppm) Ready	L_{WAd}=6.5 Bels (A) [65 dB (A)] L_{WAd}=4.9 Bels (A) [49 dB (A)]
Sound Pressure Level - Bystander Position[1, 2]	**Declared Per ISO 9296**
Printing (22 ppm) Ready	L_{pAm}=49dB (A) L_{pAm}=33 dB (A)

[1]Values current as of January 25, 2004. Values subject to change, see http://www.hp.com/support/clj5500 for current information.
[2]Configuration tested: Base unit printing A4 monochrome from standard tray.

Table 1-7. Acoustic emissions (HP Color LaserJet 5550 models)

Sound Power Level[1, 2]	**Declared Per ISO 9296**
Printing (28 ppm) Ready	L_{WAd}=6.6 Bels (A) [66 dB (A)] L_{WAd}=4.9 Bels (A) [49 dB (A)]
Sound Pressure Level - Bystander Position[1, 2]	**Declared Per ISO 9296**
Printing (28 ppm) Ready	L_{pAm}=49dB (A) L_{pAm}=33 dB (A)

[1]Values current as of January 25, 2004. Values subject to change, see http://www.hp.com/support/clj5550 for current information.
[2]Configuration tested: Base unit printing A4 monochrome from standard tray.

Table 1-8. Power Consumption (average in watts) (HP Color LaserJet 5500 models)

	Power Consumption (average, in watts)[1]			
Product Model	Printing (22 PPM)[2]	Ready[3, 4]	PowerSave (Sleep 2)	Off
HP Color LaserJet 5500	556 W	49 W	43 W	0.2 W
HP Color LaserJet 5500n	563 W	50 W	44 W	0.2 W
HP Color LaserJet 5500dn	563 W	50 W	44 W	0.2 W
HP Color LaserJet 5500dtn	592 W	50 W	44 W	0.2 W
HP Color LaserJet 5500hdn	592 W	55 W	49 W	0.2 W

[1]Values current as of April 16, 2002. Values subject to change, see http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550 for current information.
[2]Power reported is the highest value measured for color and monochrome printing using all standard voltages.
[3]Default time from Ready Mode to Sleep 2 = 30 minutes.
[4]Heat dissipation in Ready Mode = 188 BTU/Hour.

Table 1-9. Power Consumption (average in watts) (HP Color LaserJet 5550 models)

	Power Consumption (average, in watts)[1]			
Product Model	Printing (28 PPM)[2]	Ready[3, 4]	PowerSave (Sleep 2)	Off
HP Color LaserJet 5550	611 W	93 W	23 W	0.3 W
HP Color LaserJet 5550n	614 W	93 W	24 W	0.3 W
HP Color LaserJet 5550dn	630 W	93 W	24 W	0.3 W
HP Color LaserJet 5550dtn	630 W	93 W	24 W	0.3 W
HP Color LaserJet 5550hdn	632 W	93 W	28 W	0.3 W

[1]Values current as of February 2, 2004. Values subject to change, see http://www.hp.com/support/clj5550 for current information.
[2]Power reported is the highest value measured for color and monochrome printing using all standard voltages.
[3]Default time from Ready Mode to Sleep 2 = 30 minutes.
[4]Heat dissipation in Ready Mode = 318 BTU/Hour.

Supply storage requirements (HP Color LaserJet 5500 series)

The life of supplies is greatly affected by their storage environment. Use to determine the shelf life of stored supplies.

Table 1-10. Supply storage requirements

Item	Storage time	Storage condition
Temperature	Normal (maximum of 2.5 years)	0° to 35° C (32° to 95° F)
	Severe (maximum of 18 days)	High 35° to 40° C (95° to 104° F) Low 0° to -20° C (32° to -4° F)
Maximum temperature change rate	40° to 15° C (104° to 59° F) within 3 minutes -20° to 25° C (-4° to 77° F) within 3 minutes	
Humidity	Normal (maximum of 2.5 years)	35% to 85% RH
	Severe (maximum of 18 days)	High 85% to 95% RH Low 10% to 35% RH
Atmospheric pressure	460 to 760 mmHg (18.1 to 29.9 in Hg)	
Storage time[1]	2.5 years	

[1]The average storage time includes use time. Use cartridges within 2.5 years of the date code on the cartridge.

Product information

The specifications for the HP Color LaserJet 5500 and HP Color LaserJet 5550 are described in this section.

Table 1-11. Printer functions

Printer function	HP Color LaserJet 5500	HP Color LaserJet 5550
Print speed	up to 22 pages/min in A4 landscape up to 21.5 pages/min in letter up to 10 pages/min in A3 and ledger	up to 28 pages/min in A4 landscape up to 27 pages/min in letter up to 13 pages/min in A3 and ledger
First print time	Max 18 seconds	Max 16 seconds
Maximum power consumption	Max 1,380W	Max 1,440W
From Ready	Max 18 seconds	Max 16 seconds
From Cold Start	Max 155 seconds	Max 145 seconds
From Warm Start	Max 155 seconds	Max 78 seconds
From Powersave	Max 45 seconds	Max 45 seconds

Electrical specifications (HP Color LaserJet 5500 models)

WARNING! Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This may damage the printer and void the product warranty.

Table 1-12. Electrical specifications and requirements

	110-Volt Models	230-Volt Models
Power Requirements	110-127V (+/- 10%) 50/60 Hz (+/- 2 Hz)	220-240V (+/- 10%) 50/60 Hz (+/- 2 Hz)
Rated short term current	10.1 Amps	5.0 Amps

Table 1-13. Power consumption

	Power Consumption (average, in watts)[1]			
Product Model	Printing (22 PPM)[2]	Ready[3, 4]	PowerSave (Sleep 2)	Off
HP Color LaserJet 5500	556 W	49 W	43 W	0.2 W

Table 1-13. Power consumption (continued)

HP Color LaserJet 5500n	563 W	50 W	44 W	0.2 W
HP Color LaserJet 5500dn	563 W	50 W	44 W	0.2 W
HP Color LaserJet 5500dtn	592 W	50 W	44 W	0.2 W
HP Color LaserJet 5500hdn	592 W	55 W	49 W	0.2 W

[1]Values current as of April 16, 2002. Values subject to change, see http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550 for current information.
[2]Power reported is the highest value measured for color and monochrome printing using all standard voltages.
[3]Default time from Ready Mode to Sleep 2 = 30 minutes.
[4]Heat dissipation in Ready Mode = 188 BTU/Hour.

Electrical specifications (HP Color LaserJet 5550 models)

WARNING! Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This may damage the printer and void the product warranty.

Table 1-14. Electrical specifications and requirements

	110-Volt Models	230-Volt Models
Power Requirements	110-127V (+/- 10%) 50/60 Hz (+/- 2 Hz)	220-240V (+/- 10%) 50/60 Hz (+/- 2 Hz)
Rated short term current	7.0 Amps	3.0 Amps

Table 1-15. Power consumption

	Power Consumption (average, in watts)[1]			
Product Model	Printing (28 PPM)[2]	Ready[3, 4]	PowerSave (Sleep 2)	Off
HP Color LaserJet 5550	611 W	93 W	23 W	0.3 W
HP Color LaserJet 5550n	614 W	93 W	24 W	0.3 W
HP Color LaserJet 5550dn	630 W	93 W	24 W	0.3 W
HP Color LaserJet 5550dtn	630 W	93 W	24 W	0.3 W
HP Color LaserJet 5550hdn	632 W	93 W	28 W	0.3 W

[1]Values current as of February 2, 2004. Values subject to change, see http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550 for current information.
[2]Power reported is the highest value measured for color and monochrome printing using all standard voltages.
[3]Default time from Ready Mode to Sleep 2 = 30 minutes.
[4]Heat dissipation in Ready Mode = 318 BTU/Hour.

Table 1-16. Operating environment specifications

Environment	Allowed
Temperature	HP Color LaserJet 5500models:15 to 27°C (59 to 81°F) HP Color LaserJet 5550 models:10 to 30°C (50 to 86°F)
Humidity	HP Color LaserJet 5500 models: 20 to 70% RH HP Color LaserJet 5550 models: 20 to 80% RH
Altitude	(8530 ft, 2600 meters)

Media requirements

Selecting print media

You can use many types of paper and other print media with this printer. This section provides guidelines and specifications for selecting and using different print media.

Before purchasing any media or specialized forms in quantity, verify that your paper supplier obtains and understands the print media requirements specified in the *HP LaserJet Family Print Media Guide*.

It is possible that media could meet all of the guidelines in this chapter and still not print satisfactorily. This may be a result of abnormal characteristics of the printing environment or of other variables over which Hewlett-Packard has no control (for example, extremes in temperature and humidity).

Hewlett-Packard recommends testing any media before buying it in large quantities.

CAUTION Using media that does not conform to the specifications listed here and in the *HP LaserJet Family Print Media Specification Guide* can cause problems that require service. This service is not covered by the Hewlett-Packard warranty or service agreements.

Media specifications

For optimum results, use conventional 75 g/m^2 (20 lb) xerographic paper. Verify that the paper is of good quality and is free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, curls, or bent edges. Avoid fanning the print media before loading it into the paper trays.

Supported media weights and sizes (HP Color LaserJet 5500 models)

Table 1-17. Tray 1 (multi-purpose tray) supported media specifications and Table 1-18. Tray 2, Tray 3, and Tray 4 supported media specifications show the media types and sizes supported by the printer and the printer accessories.

Table 1-17. Tray 1 (multi-purpose tray) supported media specifications

Media type	Dimensions	Weight or thickness	Capacity
Standard size paper/ cardstock (Letter/A4, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17[1], A3)		60 to 200 g/m^2 (16 to 53 lb bond)	100 sheets (75 g/m^2; 20 lb bond)
Minimum size paper/ cardstock	76 by 127 mm (3 by 5 in)	60 to 200 g/m^2 (16 to 53 lb bond)	100 sheets (75 g/m^2; 20 lb bond)
Maximum size paper/ cardstock	312 by 470 mm (12.3 by 18.5 in)	60 to 200 g/m^2 (16 to 53 lb bond)	100 sheets (75 g/m^2; 20 lb bond)

Table 1-17. Tray 1 (multi-purpose tray) supported media specifications (continued)

Media type	Dimensions	Weight or thickness	Capacity
Standard size glossy paper (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)		75 to 163 g/m^2 (20 to 43 lb bond)	Maximum stack height: 10 mm (0.4 in)
Minimum size glossy paper	76 by 127 mm (3 by 5 in)	75 to 163 g/m^2 (20 to 43 lb bond)	Maximum stack height: 10 mm (0.4 in)
Maximum size glossy paper	312 by 470 mm (12.3 by 18.5 in)	75 to 163 g/m^2 (20 to 43 lb bond)	Maximum stack height: 10 mm (0.4 in)
Standard size transparencies (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)		0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Minimum size transparencies	76 by 127 mm (3 by 5 in)	0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Maximum size transparencies	312 by 470 mm (12.3 by 18.5 in)	0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Standard size tough paper (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)		0.10 to 0.13 mm thick (4 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Minimum size tough paper	76 by 127 mm (3 by 5 in)	0.10 to 0.13 mm thick (4 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Maximum size tough paper	312 by 470 mm (12.3 by 18.5 in)	0.10 to 0.13 mm thick (4 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Envelope (Com 10, Monarch, C5, DL, B5)		75 to 105 g/m^2 (20 to 28 lb bond)	20 sheets (10 mils thick
Standard size label (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)			Maximum stack height: 10 mm (0.4 in)
Minimum size label	76 by 127 mm (3 by 5 in)		Maximum stack height: 10 mm (0.4 in)
Maximum size label	312 by 470 mm (12.3 by 18.5 in)		Maximum stack height: 10 mm (0.4 in)

[1]11 x 17 inch, Ledger, and Tabloid sizes are all the same.

Table 1-18. Tray 2, Tray 3, and Tray 4 supported media specifications

Media type	Dimensions	Weight or thickness	Capacity
Standard size paper (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5[1], B5-R, A5, A5-R, 11 by 17, A3)		60 to 163 g/m^2 (16 to 43 lb bond)	500 sheets (75 g/m^2; 20 lb bond)
Minimum size paper	148 by 210 mm (5.8 by 8.3 in)	60 to 163 g/m^2 (16 to 43 lb bond)	500 sheets (75 g/m^2; 20 lb bond)
Maximum size paper/ cardstock	297 by 432 mm (11.7 by 17 in)	60 to 163 g/m^2 (16 to 43 lb bond)	100 sheets (75 g/m^2; 20 lb bond)
Standard size glossy paper (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)		75 to 163 g/m^2 (20 to 43 lb bond)	200 sheets
Minimum size glossy paper	148 by 210 mm (5.8 by 8.3 in)	60 to 163 g/m^2 (16 to 43 lb bond)	200 sheets
Maximum size glossy paper	297 by 432 mm (11.7 by 17 in)	60 to 163 g/m^2 (16 to 43 lb bond)	200 sheets
Standard size transparencies (Letter/ A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)		0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)
Minimum size transparencies	148 by 210 mm (5.8 by 8.3 in)	0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)
Maximum size transparencies	297 by 432 mm (11.7 by 17 in)	0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)
Standard size Tough paper (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 by 17, A3)		0.10 to 0.13 mm thick (4 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)
Minimum size Tough paper	148 by 210 mm (5.8 by 8.3 in)	0.10 to 0.13 mm thick (4 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)
Maximum size Tough paper	297 by 432 mm (11.7 by 17 in)	0.10 to 0.13 mm thick (4 to 5.5 mils thick)	100 sheets (0.13 mm thick; 5.5 mils thick)

Table 1-18. Tray 2, Tray 3, and Tray 4 supported media specifications (continued)

Media type	Dimensions	Weight or thickness	Capacity
Standard size label (Letter/A4, Letter-R, A4-R, Legal, Executive, JIS B5, B5-R, A5, A5-R, 11 x 17, A3)			Maximum stack height: 50 mm (2 in)
Minimum size label	148 by 210 mm (5.8 by 8.3 in)		Maximum stack height: 10 mm (0.4 in)
Maximum size label	297 by 432 mm (11.7 by 17 in)		Maximum stack height: 10 mm (0.4 in)

[1]Trays 2, 3, and 4 use “Custom” size specifically for B5 ISO. Trays 2, 3, and 4 do not support the range of custom sizes available in Tray 1.

Supported paper weights and sizes (HP Color LaserJet 5550 models)

Letter and A4 sizes can be loaded with the long-edge or short-edge leading into the printer. Long-edge first is the preferred orientation. Long-edge feed gives greater throughput, and lower consumable usage. Short-edge feed is called the rotated orientation, and is identified in the trays as LTR-R and A4-R. Short-edge feed can be useful when printing on media with special features, such as perforations or windows.

Table 1-19. Tray 1 paper sizes and types

Tray 1	Dimensions	Weight or thickness	Capacity
Minimum size (unless otherwise noted)[1]	76 by 127 mm (3 by 5 in)		
Maximum size (unless otherwise noted)[1, 2]	306 by 470 mm (12.1 by 18.5 in)		
Nondetectable standard sizes: Letter, Letter-Rotated, A4, A4-Rotated, Legal, Executive, A5, A3, RA3, 11 x 17, B4(JIS), B5(JIS), Double post card(JIS), 16K, 8K, Executive (JIS), 12 x 18, 8.5 x 13, A6, JIS-B6, Statement, #10 envelope, DL Envelope, C5 Envelope, B5 Envelope, Monarch Envelope. (Tray 1 has no automatically detectable standard sizes.)		(16 to 53 for all models lb bond)	
Plain paper		75 to 89 g/m^2 (20 to 23 lb bond)	100 sheets (75 g/m^2; 20 lb bond)

Table 1-19. Tray 1 paper sizes and types (continued)

Tray 1	Dimensions	Weight or thickness	Capacity
Light paper		60 to 74 g/m^2 (16 to 19 lb bond)	100 sheets
Intermediate paper		90 to 104 g/m^2 (24 to 27 lb bond)	Maximum stack height: 10 mm (0.4 in)
Heavy paper		105 to 119 g/m^2 (28 to 31 lb bond)	Maximum stack height: 10 mm (0.4 in)
Extra heavy paper		120 to 164 g/m^2 (32 to 43 lb bond)	Maximum stack height: 10 mm (0.4 in)
Cardstock		163 to 200 g/m^2 (44 to 53 lb bond)	Maximum stack height: 10 mm (0.4 in)
Glossy paper		75 to 105 g/m^2 (20 to 28 lb bond)	Maximum stack height: 10 mm (0.4 in)
Heavy Glossy		106 to 120 g/m^2 (29 to 32 lb bond)	Maximum stack height: 10 mm (0.4 in)
High Gloss Images		120 to 120 g/m^2 (32 to 32 lb bond)	Maximum stack height: 10 mm (0.4 in)
Transparency		0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Tough Paper		0.10 to 0.13 mm thick (4 to 5 mils thick)	Maximum stack height: 10 mm (0.4 in)
Envelopes		75 to 105 g/m^2 (20 to 28 lb bond)	20 envelopes
Labels			Maximum stack height: 10 mm (0.4 in)

[1]The media weight range is 60 to 199 g?/?m^2 (16 to 53 lb bond).
[2]Paper up to 312 mm wide can be fed through the paper path, but most drivers only support 306 mm maximum width.

NOTE The following table lists the standard sizes of paper that the printer can automatically detect when loaded in Tray 2 and optional Trays 3, 4, and 5.

Table 1-20. Tray 2 and optional Trays 3, 4, and 5 (5550 model only) paper sizes and types

Tray 2 and optional Trays 3, 4, and 5 (5550 model only)	Dimensions	Weight or thickness	Capacity
Automatically detectable standard sizes: Letter, Letter-Rotated, A4, A4-Rotated, A3, 11x17, Legal, B4 (JIS), B5 (JIS), A5, Executive. Trays 3 and 4 are optional on the HP Color LaserJet 5500 models. Trays 3, 4, and 5 are optional on the HP Color LaserJet 5550 models.			
Nondetectable standard sizes: 16K, 8K, Executive (JIS), 8.5 x 13			
Minimum Size (unless otherwise noted)[1]	76 by 127 mm (3 by 5 in)		
Maximum size (unless otherwise noted)[1]	297 by 431 mm (11.69 by 17 in)		
Plain paper		75 to 89 g/m^2 (20 to 23 lb bond)	500 sheets (75 g/m^2; 20 g/m)
Light paper		60 to 74 g/m^2 (16 to 19 lb bond)	500 sheets
Intermediate paper		90 to 104 g/m^2 (24 to 27 lb bond)	Maximum stack height: 50 mm (2.0 in)
Heavy paper		105 to 119 g/m^2 (28 to 31 lb bond)	Maximum stack height: 50 mm (2.0 in)
Extra heavy paper[2]		120 to 163 g/m^2 (32 to 43 lb bond)	Maximum stack height: 50 mm (2.0 in)
Glossy paper		75 to 105 g/m^2 (20 to 28 lb bond)	200 sheets
High Gloss Images		120 to 120 g/m^2 (32 to 32 lb bond)	Maximum stack height: 10 mm (0.4 in)
Labels			Maximum stack height: 50 mm (2 in)
Transparency		0.12 to 0.13 mm thick (4.7 to 5.5 mils thick)	100 sheets
Tough paper		0.10 to 0.13 mm thick (4 to 5 mils thick)	100 sheets

[1]The media size weight range is 60 to 163 g?/?m^2 (16 to 43 lb).
[2]The use of Extra heavy paper from Trays 2, 3, 4, and 5 is allowed, but the performance cannot be guaranteed due to the wide variation in these papers.

Table 1-21. Automatic two-sided printing (duplexing)[1]

Automatic two-sided printing	Dimensions	Weight or thickness	Capacity
Standard size paper, Letter, Letter-Rotated, A4, A4-Rotated, Legal, Executive, A3, 11x17, B4 (JIS), B5 (JIS)		60 to 120 g/m^2 (16 to 32 lb bond)	

[1]The printer automatically prints on paper weights up to 163 g/m^2. However, automatic two-sided printing on weights above the maximum value noted in this table can produce unexpected results.

Manual two-sided (duplex) printing. Any of the supported paper sizes listed for printing from Tray 1 can be manually duplexed.

Media specifications for 2-sided (duplex) printing

For **automatic** 2-sided printing, you can use any of the following standard-size paper in weights from 60 to 120 g/m^2 (16 to 32 lb bond):

- Letter/A4
- A3
- Legal
- Executive
- JIS B5
- B4
- 11 x 17 inch

NOTE The printer automatically prints on paper weights up to 163 g/m^2. However, automatic 2-sided printing on weights above the maximum value noted above can produce unexpected results.

NOTE Automatic 2-sided printing does not support rotated (short-edge first) orientation.

For **manual** 2-sided printing, you can use any of the supported paper sizes listed for printing from Tray 1.

Media to avoid

This printer can handle many types of media. Using media outside the printer's specifications will cause a loss of print quality and increase the chance of paper jams occurring.

- Do not use paper that is too rough.
- Do not use paper with cutouts or perforations other than standard 3-hole punched paper.
- Do not use multipart forms.
- Do not use paper that has already been printed on or fed through a photocopier or printer.
- Do not use paper with a watermark if you are printing solid patterns.
- Do not use paper that is embossed.

Media that may cause damage to the printer

In rare circumstances media can damage the printer. To prevent possible damage, do not use the following media:

- Do not use paper that is coated unless it is specifically recommended for use in this printer.
- Do not use paper with staples.
- Do not use paper with irregularities such as tabs or cuts.
- Do not use preprinted forms or letterhead paper with low temperature dyes or thermography. Preprinted forms or letterhead must use inks that can tolerate temperatures of 190°C (374°F) for 0.1 second.
- Do not use any media that produces hazardous emissions, or that melts, offsets, or discolors when exposed to 190°C (374°F) for 0.1 second.
- Do not use transparencies designed for use with Inkjet printers or other low temperature printers. Use only transparencies that are specified for use with HP Color LaserJet printers.

Printing on special media

Use these guidelines when printing on special types of media.

- For optimum results, use conventional 75 g/m^2 (20 lb) xerographic paper.
- Verify that the paper is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, curls, or bent edges.

Transparencies

When printing on transparencies, use the following guidelines.

- Handle transparencies using the edges. Oils from your fingers can remain on the transparency and can cause print quality problems.
- Use only overhead transparencies recommended for use in this printer. Hewlett-Packard recommends using HP Color LaserJet transparencies with this printer. HP products are designed to work together for optimum printing results.
- In either the software application or the driver, select **Transparency** as the media type. Or, print from a tray that is configured for transparencies.
- Transparencies are not supported from Tray 5 in the HP LaserJet 5550 model.

CAUTION Transparencies not designed for LaserJet printing will melt in the printer, causing damage to the printer.

Printing on transparencies

Table 1-22. Printing on transparencies

Description	Specifications
Electrical surface resistivity	2 to 15 x 10**^{10} ohms per square inch

Table 1-22. Printing on transparencies (continued)

Description	Specifications
Fusing compatibility	Materials must not discolor, melt, offset, or release hazardous emissions when heated to 190°C ((374°F)) for 0.1 second.
Caliper (thickness)	0.12 mm (0.0048 in) to 0.13 mm (0.0052 in)

Glossy paper

- In either the software application or the driver, select **Glossy** or **Heavy Glossy** as the media type, or print from a tray that is configured for glossy paper.

  Select **Glossy** for media weights up to 105 g/m^2 (28 lb bond). Select **Heavy Glossy** for media weights of 105 g/m^2 (28 lb bond) and heavier.

- Use the control panel to set the media type to **GLOSSY** or **HEAVY GLOSSY** for the input tray being used.

NOTE Hewlett-Packard recommends using HP Color LaserJet Soft Gloss paper with this printer. HP products are designed to work together for optimum printing results. If HP Color LaserJet Soft Gloss paper is not used with this printer, print quality may be compromised.

Colored paper

- Colored paper should be of the same high quality as white xerographic paper.
- Pigments used must be able to withstand the printer's fusing temperature of 190° C (374° F) for 0.1 second without deterioration.
- Do not use paper with a colored coating that was added after the paper was produced.
- The printer creates colors by printing patterns of dots, overlaying and varying their spacing to produce various colors. Varying the shade or color of your paper will affect the shades of your printed colors.

Heavy paper

Table 1-23. Paper specifications

Paper type	Paper weight
Heavy	105-119 g/m^2 (28-31 lb)
Extra heavy	120-163 g/m^2 (32-43 lb)
Cardstock	163-200 g/m^2 (44-53 lb)

- Any of the trays will print most heavy media that does not exceed 163 g/m^2 (47 lb bond).
- For optimum results when printing on heavy paper, use the printer control panel to set the media type for the tray to **HEAVY** (106 g/m^2 to 163 g/m^2).
- Use card stock only in Tray 1 (163 g/m^2 to 200 g/m^2).

- In either the software application or the driver, select **Heavy** or **Cardstock** as the media type, or print from a tray that is configured for heavy paper.
- Because this setting affects all print jobs, it is important to return the printer to its original settings once your job has printed. See the section in the online user guide on configuring input trays.

CAUTION In general, do not use paper that is heavier than the recommended specification for this printer. Doing so can cause misfeeds, jams, inferior print quality, and excessive mechanical wear. However, some heavier media types, such as HP Cover Stock, can be safely used. See Table 1-17. Tray 1 (multi-purpose tray) supported media specifications for supported paper types and sizes.

Printing images (HP Color LaserJet 5550 models)

To obtain the best print quality when printing images, use HP High Gloss Laser Paper (Q2419A). In either the software program or the driver, select **HIGH GLOSS** or print from a tray that is configured for glossy paper.

- In either the software program or the printer driver, select **HIGH GLOSS (IMAGES)** as the media type, or print from a tray that is configured for glossy paper.
- You can also configure the printer by using settings on the printer control panel.

Envelopes

Envelopes can be printed only from Tray 1. Set the tray's media size to the specific envelope size. For information about loading envelopes, see the section in the online user guide about loading envelopes into Tray 1.

Adhering to the following guidelines will help ensure proper printing on envelopes and help prevent printer jams:

- Do not load more than 20 envelopes into Tray 1.
- The weight rating of envelopes should not exceed 105 g/m^2 (28 lb).
- Envelopes should be flat.
- Do not use envelopes with windows or clasps.
- Envelopes must not be wrinkled, nicked, or otherwise damaged.
- Envelopes with peel-off adhesive strips must use adhesives that can withstand the heat and pressures of the printer's fusing process.
- Envelopes should be loaded face-down and with the top of the envelope to the left, and the short edge feeding into the printer first.

NOTE In high humidity environments, envelopes should be printed long-edge first to prevent them from sealing during printing. For long-edge printing, envelopes should be loaded long-edge first, face-down. See the section in the online user guide about loading envelopes in Tray 1.

CAUTION To prevent severe printer damage, do not use envelopes that have windows, clasps, snaps, or synthetic materials.

Labels

NOTE To print labels, set the tray's media type to **LABELS** in the printer control panel.

When printing labels, use the following guidelines:

- Verify that the label's adhesive material can tolerate temperatures of 190°C (374°F) for 0.1 second.
- Verify that adhesive material is not exposed between the labels. Exposed areas can cause labels to peel off during printing, which can cause printer jams. Exposed adhesive can also cause damage to printer components.
- Do not re-feed a sheet of labels.
- Verify that labels lie flat.
- Do not use labels that are wrinkled, bubbled, or otherwise damaged.

HP LaserJet Tough paper

When printing on HP LaserJet Tough paper, use the following guidelines:

- Handle HP LaserJet Tough paper using the edges. Oils from your fingers deposited on HP LaserJet Tough paper can cause print quality problems.
- Use only Hewlett-Packard LaserJet Tough paper with this printer. HP products are designed to work together for optimum printing results.
- In either the software application or the driver, select **Tough Paper** as the media type, or print from a tray that is configured for HP LaserJet Tough paper.

Preprinted forms and letterhead

Observe the following guidelines for best results with preprinted forms and letterhead:

- Forms and letterhead must be printed with heat-resistant inks that will not melt, vaporize, or release hazardous emissions when subjected to the printer's fusing temperature of approximately 190°C (374°F) for 0.1 second.
- Inks must be non-flammable and should not adversely affect any printer rollers.
- Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage.
- To load preprinted forms and letterhead into Tray 1, load them face down with the top edge of the page to the left.
- Before you load preprinted paper such as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off of preprinted paper.
- When simplex printing, load pre-printed forms and letterhead into trays 2, 3, 4, and 5 (HP Color LaserJet 5550 models) face-up with the top edge of the page to the left. To load pre-printed forms and letterhead into Tray 1, load them face-down with the top edge of the page to the left.
- When duplex printing, load preprinted forms and letterhead into Trays 2, 3, 4, and 5 (Tray 5 HP Color LaserJet 5550 models) face-down with the top edge of the page to the left. Load preprinted forms and letterhead into Tray 1 face-up with the top edge of the page to the left.

Recycled paper

This printer supports the use of recycled paper. Recycled paper must meet the same specifications as standard paper; refer to the *HP LaserJet Printer Family Print Media Guide*, available through HP Direct. See the online user guide for ordering information. Hewlett-Packard recommends that recycled paper contain no more than 5% groundwood.

Weight equivalence table

Table 1-24. Weight equivalence table shows equivalent weights for different grades of paper. A boldface type value indicates a commonly available standard weight for that grade.

NOTE Text and book grades marked with an asterisk (*) actually calculate to 51, 61, 71, and 81 but are rounded to standard book or text weights of 50, 60, 70, and 80.

Table 1-24. Weight equivalence table

Bond weight (17 x 22 inches)	Text/Book weight (25 x 38 inches)	Cover weight (20 x 26 inches)	Bristol weight (22.5 x 28.5 inches)	Index weight (25.5 x 30.5 inches)	Tag weight (24 x 36 inches)	Metric weight
16#	41#	22#	27#	33#	37#	**60 g/m^2**
17#	43#	24#	29#	35#	39#	**64 g/m^2**
20#	50# *	28#	34#	42#	46#	**75 g/m^2**
21#	54#	30#	36#	44#	49#	**80 g/m^2**
24#	**60#** *	33#	41#	50#	55#	**90 g/m^2**
27#	68#	37#	45#	55#	61#	**100 g/m^2**
28#	**70#** *	39#	49#	58#	65#	105 g/m2
29#	74#	41#	50#	61#	68#	**110 g/m^2**
32#	**80#** *	44#	55#	67#	74#	**120 g/m^2**
36#	90#	**50#**	62#	75#	83#	**135 g/m^2**
39#	**100#**	55#	**67#**	82#	91#	148 g/m2
40#	101#	55#	68#	83#	92#	**150 g/m^2**
43#	110#	**60#**	74#	**90#**	**100#**	163 g/m2
45#	115#	63#	77#	94#	104#	**170 g/m^2**
47#	119#	**65#**	80#	97#	108#	176 g/m2
51#	128#	70#	86#	105#	117#	**190 g/m^2**
53#	134#	74#	90#	**110#**	122#	199 g/m2
54#	137#	75#	93#	113#	**125#**	203 g/m2

Table 1-24. Weight equivalence table (continued)

Bond weight (17 x 22 inches)	**Text/Book weight** (25 x 38 inches)	**Cover weight** (20 x 26 inches)	**Bristol weight** (22.5 x 28.5 inches)	**Index weight** (25.5 x 30.5 inches)	**Tag weight** (24 x 36 inches)	**Metric weight**
58#	146#	**80#**	98#	120#	133#	216 g/m2
65#	165#	**90#**	111#	135#	**150#**	244 g/m2
66#	169#	92#	114#	138#	154#	**250 g/m**^{2}
67#	171#	94#	115#	**140#**	155#	253 g/m2
70#	178#	98#	**120#**	146#	162#	264 g/m2
72#	183#	**100#**	123#	150#	166#	271 g/m2

Hewlett-Packard warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Color LaserJet 5500/5550, 5500n/5550n, 5500dn/5550dn, 5500dtn/5550dtn, and 5500hdn/5550hdn printers	1 year limited warranty

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Limited warranty for print cartridge life

This HP product is warranted to be free from defects in materials and workmanship.

This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem and print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

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HP's Premium Protection Warranty. Color LaserJet Image Fuser Kit and Image Transfer Kit Limited Warranty Statement

This HP product is warranted to be free from defects in materials and workmanship until the printer provides a low-life indicator on the control panel.

This warranty does not apply to products that (a) have been refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Declaration of Conformity

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Company
Manufacturer's Address:	11311 Chinden Boulevard, Boise, Idaho 83714-1021, USA

declares that the product

Product Name:	HP Color LaserJet 5500/5500n/5500dn/5500dtn/5500hdn Including: 500-sheet paper feeder unit
Regulatory Model Number:	BOISB-0202-00
Product Options:	All

conforms to the following Product Specifications:

Safety:	IEC 60950:1999 / EN60950:2000 IEC 60825-1:1993 + A1 +A2 / EN 60825-1 + A11 +A2 Class 1 Laser/LED Product GB4943-2001
EMC:	CISPR 22:1993 + A1 + A2 / EN 55022:1994 + A1 + A2 Class B[1*] EN 61000-3-2:2000 EN 61000-3-3:1995 / A1:2001 EN 55024:1998 FCC Title 47 CFR, Part 15 Class B[2] / ICES-003, Issue 4 / GB9254-1998

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly:

1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

2) This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

*) This product includes LAN (Local Area Network) options. When the interface cable is attached to LAN connectors, the product meets the requirements of EN55022 Class A in which case the following applies: "Warning—This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures".

Boise, Idaho 83713, USA

9 February, 2005

For regulatory topics only:

Australia Contact	Product Regulations Manager, Hewlett-Packard Australia, Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia
European Contact	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Straße 140, D-71034 Böblingen, Germany (FAX: +49-7031-14-3143)
USA Contact	Product Relations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160 Boise, Idaho 83707-0015, (Phone: 208-396-6000)

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Company
Manufacturer's Address:	11311 Chinden Boulevard, Boise, Idaho 83714-1021, USA

declares that the product

Product Name:	HP Color LaserJet 5550/5550n/5550dn/5550dtn/5550hdn
Regulatory Model Number[4]:	BOISB-0310-00 Including Q3956A—Optional 500-Sheet Input Tray Q9669A—Optional Printer Stand
Product Options:	All

conforms to the following Product Specifications:

Safety:	IEC 60950:1999 / EN60950:2000 IEC 60825-1:1993 + A1 +A2 / EN 60825-1:1994+A11+A2 (Class 1 Laser/LED Product) GB4943-2001
EMC:	CISPR 22:1997 / EN 55022:1998 - Class B[1), 3)] EN 61000-3-2:2000 EN 61000-3-3:1995 / A1:2001 EN 55024:1998/A1:2001 FCC Title 47 CFR, Part 15 Class B[2] / ICES-003, Issue 4 GB9254-1998, GB17625.1-1998

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly:

1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems Compliance testing of product to standard with exception of Clause 9.5, which is not yet in effect.

2) This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

3) The product includes LAN (Local Area Network) options. When the interface cable is attached to LAN connectors, the product meets the requirements of EN55022 and CNS13438 Class A in which case the following applies: "Warning—This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures".

4) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho 83713, USA

8 February, 2005

For regulatory topics only:

Australia Contact	Product Regulations Manager, Hewlett-Packard Australia, Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia
European Contact	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Straße 140, D-71034 Böblingen, Germany (FAX: +49-7031-14-3143)
USA Contact	Product Relations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160 Boise, Idaho 83707-0015, (Phone: 208-396-6000)

Laser safety statement

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since 1 August 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a “Class 1” laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation. Invisible laser beam is emitted within the laser/scanner unit. Do not disassemble the laser/scanner unit, as the laser beam can injure your eyes.The unit cannot be adjusted in the field. The label shown below is attached to the laser/scanner unit cover.

WARNING! Using controls, making adjustments, or performing procedures other than those specified in this guide may result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

‹Conforme á la classe B des normes canadiennes de compatibilité électromagnétiques. ‹CEM›.››

EMI statement (Korea)

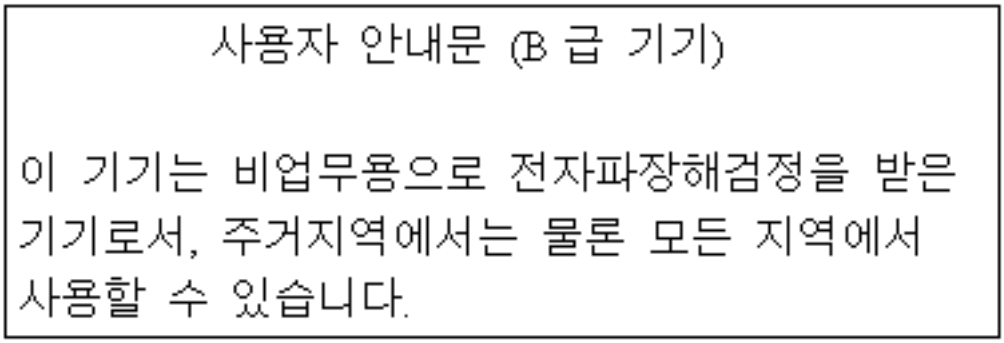

Figure 1-7. **EMI statement for Korea**

VCCI statement (Japan)

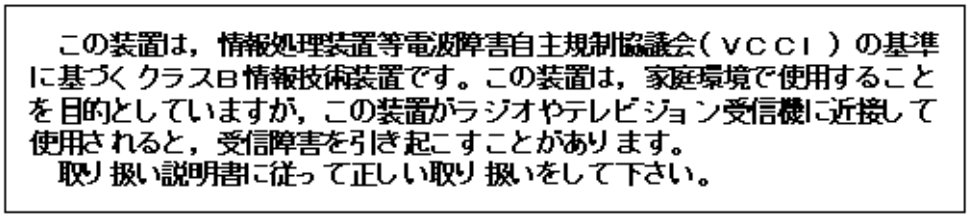

Figure 1-8. **VCCI statement for Japan**

Laser Statement for Finland

Luokan 1 laserlaite
Klass 1 Laser Apparat
HP Color LaserJet 5500/5550, 5500n/5550n, 5500dn/5550dn, 5500dtn/5550dtn, 5500hdn/5550hdn laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.
VAROITUS !
Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.
VARNING !
Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.
HUOLTO
HP Color LaserJet 5500/5550, 5500n/5550n, 5500dn/5550dn, 5500dtn/5550dtn, 5500hdn/5550hdn -kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.
VARO !
Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömällelasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.
VARNING !
Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen. Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser.

Toner safety

HP Planet Partners™ returns and recycling service offers HP LaserJet printing supplies recycling free of charge in many countries/regions around the world. Check the inside of your new HP LaserJet toner cartridge box. You will find a Return and Recycle Guide inside the box. There should be a prepaid and preaddressed mailing label inside the Guide. Follow the instructions provided.

NOTE

In case of toner spills, skin and clothing are best cleaned by removing as much toner as possible with a dry tissue, then washing with cold water. Hot water causes toner to permanently set into clothing.

2 Service approach

Chapter contents

This chapter contains information about the following topics.

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- Ordering supplies 43
- Ordering parts, supplies, and accessories over the Internet 43
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Service approach

Table 2-1. Printer repair normally begins by using the printer's internal diagnostics and the three-step process below.

Step 1	Isolate the problem to the major system (for example, the host computer, the network or server, or the printer system).
Step 2	Determine if the problem is located in the accessories or in the printer engine.
Step 3	Troubleshoot the problem using the procedures in Chapter 7.

Once a faulty part is located, the printer can usually be repaired at the assembly level by replacing field replaceable units (FRUs). Some mechanical assemblies might need to be repaired at the subassembly level. Hewlett-Packard does not support replacement of components on the printer circuit assembles.

Parts and supplies

This section discusses how to order parts and supplies

Ordering parts

Field replaceable and accessory part numbers are found in Chapter 8 of this manual. Order replacement parts from Hewlett-Packard Customer Support-Americas (HPCS-A) or Hewlett-Packard Customer Support-Europe (HPCS-E).

NOTE Use only accessories specifically designed for this printer. Accessories can be ordered from an authorized service or support provider.

By phone:

- Hewlett-Packard Customer Support-Americas (HPCS-A) 800-227-8164 (U.S. only)
- Hewlett-Packard Customer Support-Europe (HPCS-E) 49-703114-2253

By mail:

Hewlett-Packard Company HPCS-A 8050 Foothills Blvd. Roseville, CA 95678	Hewlett-Packard Company HPCS-E Wolf-Hirth Straße 33 D-7030 Böblingen, Germany

Ordering supplies

Order supplies directly from Hewlett-Packard. The phone numbers for ordering supplies are:

- U.S. 800-538-8787
- United Kingdom 0734-441212
- Other local phone numbers may also be available

Ordering parts, supplies, and accessories over the Internet

To order supplies in the US, contact www.hp.com/go/ljsupplies. To order supplies worldwide, see www.hp.com/ghp/buyonline.html. To order accessories, see www.hp.com.

Ordering directly through the embedded Web server (for printers with network connections)

Use the following steps to order printing supplies directly through the embedded Web server.

1. In the Web browser on the computer, type the IP address for the printer. The printer status window appears. Or, go to the URL provided in the alert email.

2. Click **Other Links**.
3. Click **Order Supplies**. The browser opens to a page in which you can choose to send information about the printer to HP. You also have the option to order supplies without sending the printer information to HP.
4. Select the part numbers you want to order and follow the instructions on the screen.

Ordering directly through the HP Toolbox software (HP Color LaserJet 5550 model only)

The HP Toolbox software gives you the ability to order supplies directly from the computer. Two things are necessary to use this feature:

- The HP Toolbox software must be installed on your computer. (It is automatically installed as part of the typical software installation.)
- You must have access to the World Wide Web.

1. At the bottom right of the screen (in the system tray), click the **hp Toolbox** icon. The software opens in a Web browser. (Or, on the **Start** menu, select **Programs**,**Hewlett Packard**, **HP Color LaserJet 5550**, and then select **HP Toolbox**.)
2. On the left side of the window, click **Other Links**.
3. Click **Order Supplies**. The browser opens to the supplies purchasing page.
4. Select the supplies you want to order.

Exchange program

HP offers remanufactured assemblies for some parts. These are identified in Chapter 8 and can be ordered from Hewlett-Packard Customer Support-Americas (HPCS-A) or Hewlett-Packard Customer Support-Europe (HPCS-E).

Supplies

Paper and print cartridges can be ordered directly from Hewlett-Packard. See Chapter 8 for ordering information.

World Wide Web

Printer drivers, updated HP printer software, and product and support information can be obtained from the following URL:

In the U.S.: www.hp.com/support/clj5500 or www.hp.com/support/clj5550

Printer drivers can be obtained from the following sites:

In China: ftp://www.hp.com.cn/support/clj5500 or ftp://www.hp.com.cn/support/clj5550

In Japan: ftp://www.jpn.hp.com/support/clj5500 or ftp://www.jpn.hp.com/support/clj5550

In Korea: www.hp.co.kr/support/clj5500 or www.hp.co.kr/support/clj5550

In Taiwan: www.hp.com.tw/support/clj5500 or www.hp.com.tw/support/clj5550

or the local driver Web site: www.dds.com.tw

Parts identification and pricing information can be found at the following Web site: www.hp.com/go/hpparts

HP service parts information compact disc

This powerful, CD-ROM-based parts information tool is designed to give users fast, easy access to parts information such as pricing and recommended stocking lists for a wide range of HP products. To subscribe to this quarterly service in the U.S. or Canada, call 800-336-5987. In Asia Pacific, call 65-740-4484. Parts identification and pricing information can also be checked via the World Wide Web at http://isis.tay.cpqcorp.net/materials/reference/partcontracts.asp.

HP support assistant compact disc

This support tool offers a comprehensive online information system designed to provide technical and product information about HP products. To subscribe to the quarterly service in the U.S. or Canada, call 800-457-1762. In Hong Kong SAR, Indonesia, Malaysia, or Singapore, call Mentor Media at 65-740-4477.

Customer care reseller sales and service support center

The Customer Care Reseller Sales and Support Center is available to assist resellers and service technicians. To reach this support center, call 800-544-9976.

HP service agreements

Call 800-743-8305 in the U.S. or 800-268-1221 in Canada.

Other areas

Outside of North America and Europe, contact the local HP sales office for assistance in obtaining technical support for resellers and service technicians.

HP customer care

Online services

For 24-hour access to information using a modem or Internet connection:

World Wide Web URL: for the HP Color LaserJet 5500/5550 models, updated HP printer software, product and support information, and printer drivers in several languages can be obtained from www.hp.com/support/clj5500 or www.hp.com/support/clj5550. (Sites are in English.)

Visit www.hp.com/support/net_printing for information about the HP Jetdirect 5550 external print server.

HP Instant Support Professional Edition (ISPE) is a suite of Web-based troubleshooting tools for desktop computing and printing products. ISPE helps you quickly identify, diagnose, and resolve computing and printing problems. The ISPE tools are available at www.instantsupport.hp.com.

Telephone support

HP provides free telephone support during the warranty period. When you call, you will be connected to a responsive team waiting to help you. For the telephone number for your country/region, see the flyer that shipped in the box with the product, or visit www.hp.com/support/callcenters. Before calling HP, have the following information ready: product name and serial number, date of purchase, and description of the problem.

You can also find support on the Internet at www.hp.com. Click the **support & drivers** block.

Software utilities, drivers, and electronic information

Visit www.hp.com/go/clj5500_software or www.hp.com/go/clj5550_software for the HP Color LaserJet 5500 models. The Web page for the drivers might be in English, but you can download the drivers in several languages.

See the flyer that shipped in the box with the printer for phone-contact information.

HP service information

To locate HP-Authorized Dealers, call 800-243-9816 (U.S.) or 800-387-3867 (Canada). For service for your product, call the customer support number for your country/region. See the flyer that shipped in the box with the printer.

HP service agreements

Call 800-835-4747 (U.S.) or 800-268-1221 (Canada).

For extended Service call, 800-446-0522

HP Toolbox (HP Color LaserJet 5550 models only)

To check the printer status and settings and to view troubleshooting information and online documentation, use HP Toolbox. You can view the HP Toolbox when the printer is directly connected to your computer or when it is connected to a network. You must have performed a complete software installation to use the HP Toolbox.

HP support and information for Macintosh computers

Visit www.hp.com/go/macosx for Macintosh OS x support information and HP subscription service for driver updates.

Visit www.hp.com/go/mac-connect for products designed specifically for the Macintosh user.

Ordering related documentation and software

Table 2-2. Related documentation and software shows where to order related documentation and software. Telephone numbers for the various sources are:

- Hewlett-Packard Customer Support-Americas (HPCS-A) 800-227-8164 (U.S. only)
- HP Distribution Center (HPD) (661) 257-5565. Fax: 805-257-6995

NOTE In other countries/regions contact your local sales office.

Table 2-2. Related documentation and software

Description	Part Number
HP LaserJet Family Print Media Guide	5963-7863
HP JetDirect Print Server Administrator's Guide	5971-3257
PCL/PJL Technical Reference Package	5021-0377

Table 2-2. Related documentation and software (continued)

Description	Part Number
HP Color LaserJet 5500 Series Getting Started Guide	C9656-90925
HP Color LaserJet 5500 Series Service Manual	Q3713-90965
HP Color LaserJet 5500 Series Printer Service and Support CD-ROM	Q3713-60112

HP maintenance agreements

HP has several types of maintenance agreements that meet a wide range of support needs. Maintenance agreements are not part of the standard warranty. Support services may vary by area. Check with your local HP dealer to determine the services available to you.

On-site service agreements

To provide you with the level of support best suited to your needs, HP has on-site service agreements with three response times.

Priority on-site service

This agreement provides 4-hour service response to your site for calls made during normal HP business hours.

Next-day on-site service

This agreement provides support by the next working day following a service request. Extended coverage hours and extended travel beyond HP's designated service zones are available on most on-site agreements (for additional charges).

Weekly (volume) on-site service

This agreement provides scheduled weekly on-site visits for organizations with many HP products. This agreement is designated for sites using 25 or more workstation products, including printers, plotters, computers, and disk drives.

For more information on HP service agreements, call 800-835-4747 (U.S.) or 800-268-1221 (Canada).

3 Installation and configuration

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LocalTalk configuration 80
LocalTalk network configuration 80
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Printer driver Help 84
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Configuring TCP/IP parameters 96
Setting network security on the printer 102
Locking the control panel 102
Using an ASCII PJL escape sequence to set network security 103

Site requirements

Environmental specifications

Keep the printer within the environmental conditions shown in Table 1-4, Environmental specifications, for optimum performance.

The printer must be kept in a proper location to maintain the performance level that has been set at the factory. In particular, be sure that the environment adheres to the specifications listed in this chapter.

Below are recommendations for the printer location and placement.

Make sure the printer has the following:

- A well-ventilated, dust-free area
- A surface that will support the particular printer model
- A hard, level surface (not more than a 2° angle)
- For the HP Color LaserJet 5500/5550, 5500n/5550, and 5500/5550dn, the surface must support up to 60 kg (132 lb)
- For the HP Color LaserJet 5500dtn and HP Color LaserJet 5550dtn, the surface must support up to 113 kg (250 lb)
- For the HP Color LaserJet 5500hdn, the surface must support up to 128 kg (283 lb)
- For the HP Color LaserJet 5550hdn, the surface must support up to 144 kg (317 lb)
- A level surface that supports all four corners of the 500-sheet paper feeder
- A constant temperature and humidity (Do not install near water sources, humidifiers, air conditioners, refrigerators, or other major appliances.)

Make sure to keep the printer away from the following:

- Direct sunlight, dust, open flames, or water
- Direct flow of exhaust from air ventilation systems
- Magnets and devices that emit a magnetic field
- Areas subject to vibration
- Walls or other objects. There must be enough space around the printer for proper access and ventilation.

Space requirements

The printer must have the following amounts of space above and around it.

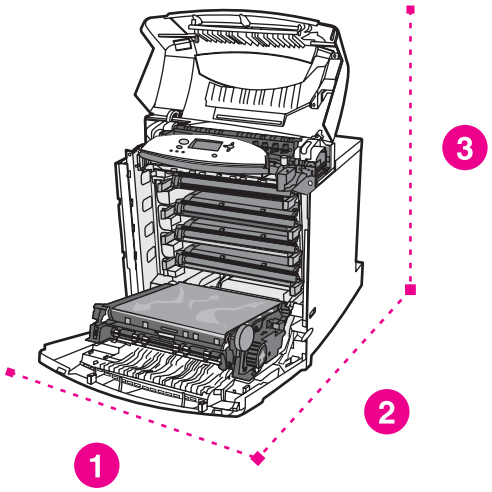


Figure 3-1. **Space requirements (printer only)**

1 628 mm (25 inches)
2 1090 mm (43 inches)
3 940 mm (37 inches)

500-sheet paper feeder dimensions

For each additional 500-sheet paper feeder installed, add the height from the list below to the height of the printer.

- Width = 578 mm (22.8 inches)
- Depth = 662 mm (26.2 inches)
- Height = 132 mm (5.2 inches)

Printer stand dimensions

If the printer is on a stand, add the height from the list below to the total height. Also note that the stand increases the overall width space requirement.

HP Color LaserJet 5500 models only

- Width = 630 mm (24.8 inches)
- Depth = 670 mm (26.5 inches)
- Height = 202 mm (8.0 inches)

HP Color LaserJet 5550 models only

- Width = 628.7 mm (24.7 inches)
- Depth = 727 mm (28.6 inches)
- Height = 130.2 mm (4.1 inches)

Unpack the printer

This section provides instructions for unpacking the printer.

Package contents

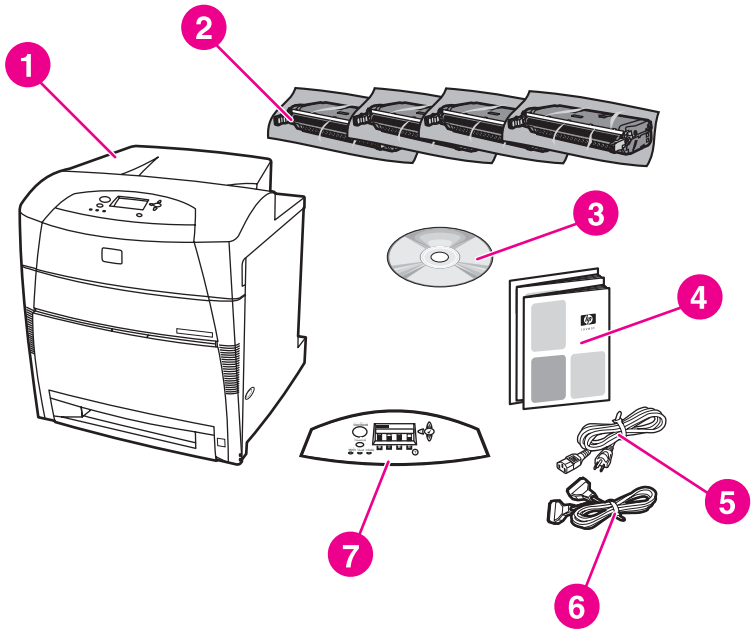


Figure 3-2. **Package contents for HP Color LaserJet 5500, 5500n, and 5500dn**

1 HP Color LaserJet 5500, 5500n, and 5500dn models
2 Print cartridges
3 Software and electronic documentation
4 Getting Started Guide
5 Power cord
6 Parallel cable (base models only)
7 Control panel overlay

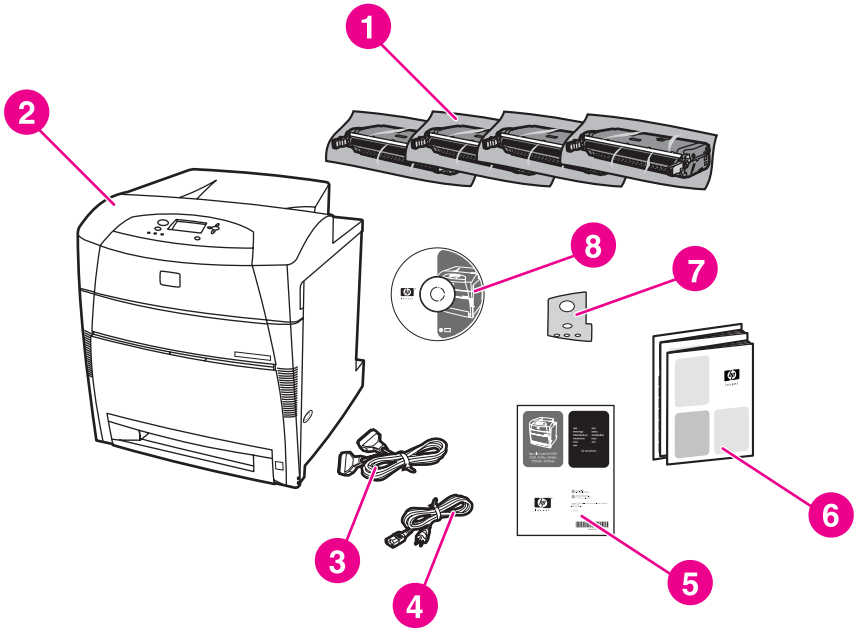


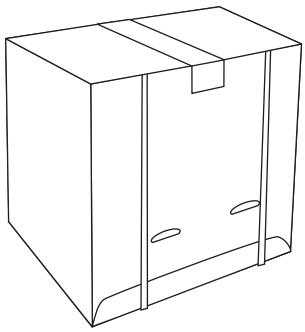
Figure 3-3. **Package contents for HP Color LaserJet 5550, 5550n, and 5550dn**

1 Print cartridges
2 HP Color LaserJet 5550, 5550n, and 5550dn models only
3 Parallel cable (base models only)
4 Power cord
5 Getting Started Guide
6 Network Installation Guide
7 Control panel label
8 CD

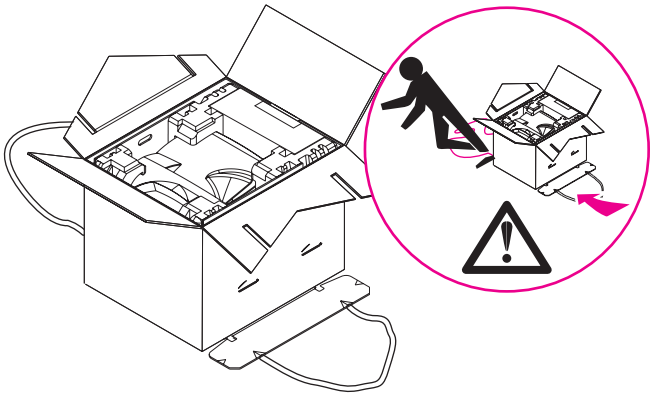
Unpacking the HP Color LaserJet 5500 series printer (for base models 5500n and 5500dn)

NOTE Save all the packing materials in case you need to repack and transport the printer at a later date.

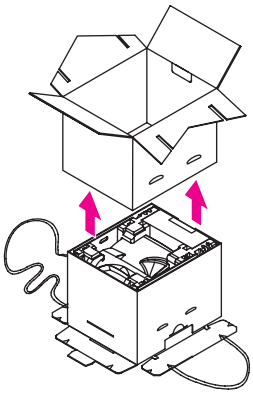
1. Cut the tape to open the box and unpack the printer.



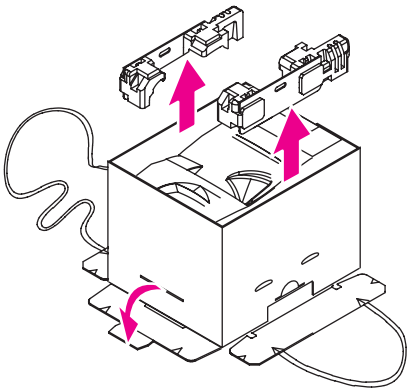
2. Open the flaps and disconnect the strapping loops.



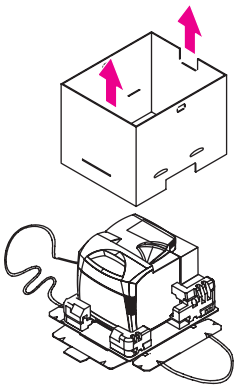
3. Lift the box off and set it aside.



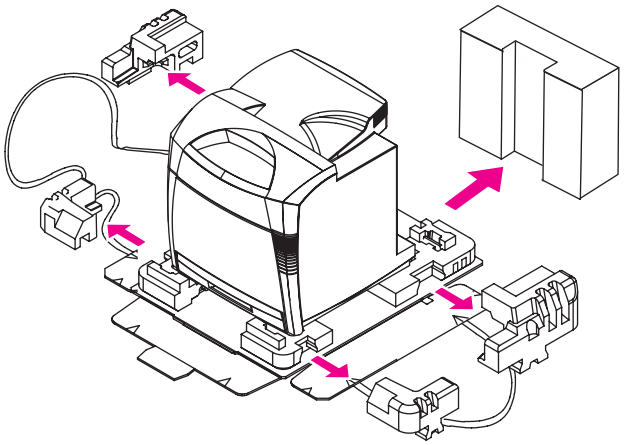
4. Locate the two connecting tabs on the bottom. Bend the tabs out and down. Remove the two top cushion rails.



5. Lift the inner sleeve up and off of the printer.



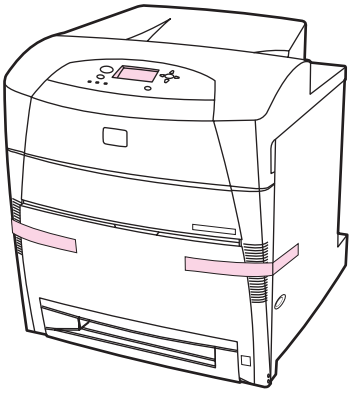
6. Remove the accessory box. Slide the top sections of each packing cushion off.



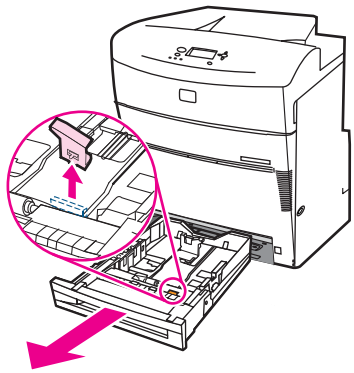
WARNING! The printer weighs approximately 65 kg (132 lb). HP recommends having four people lift or move the printer.

7. It takes four people to lift and move the printer. Grip the printer at the four corners and move it to the prepared location.

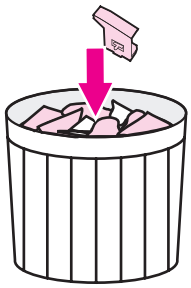
8. For the HP Color LaserJet 5500 models, remove the orange packing tape from the printer. Remove the clear plastic film from the control panel.



9. For the HP Color LaserJet 5550 models, remove the clip from the tray.

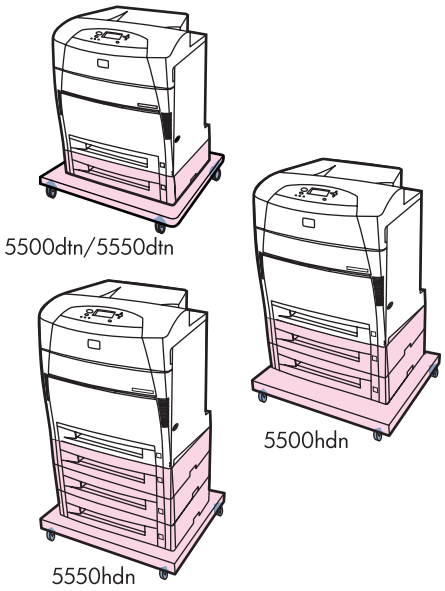


10. Discard the clip.

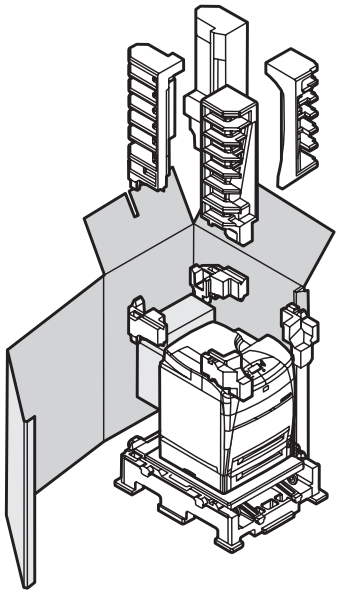


Unpacking the HP Color LaserJet 5500/5550dtn and 5500/5550hdn models

1. The following illustration shows the HP Color LaserJet 5500/5550dtn and 5500/5550hdn printers.

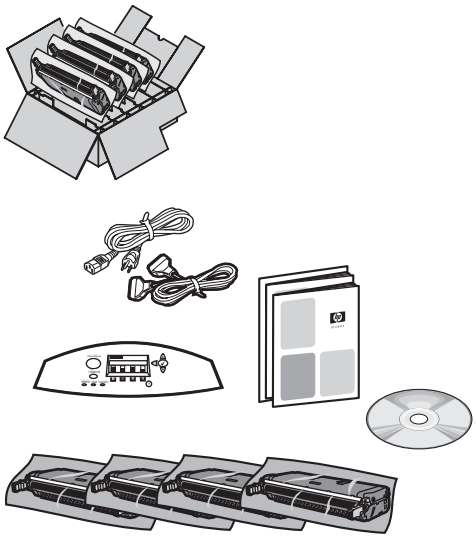


2. Open the crate and remove the packing material.



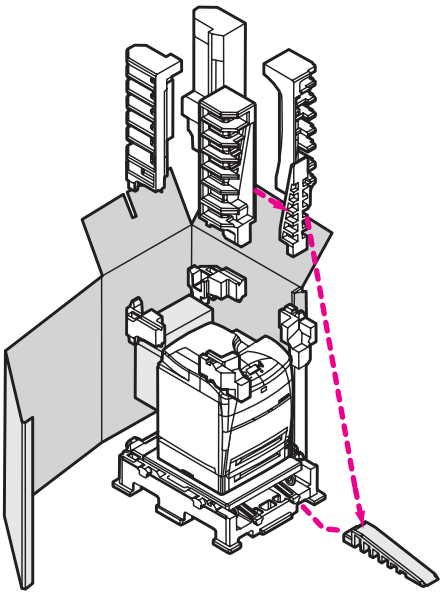
3. Remove the documentation, power cords, cables, print cartridges, and other materials as shown below.

   HP Color LaserJet 5500dtn and 5500 hdn contents

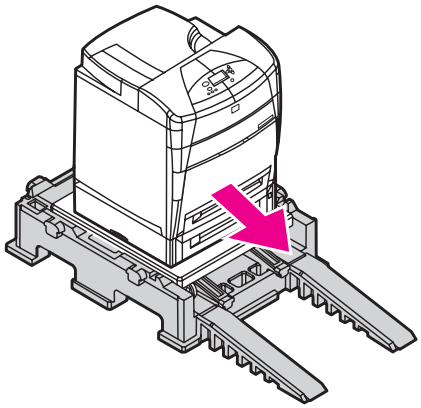


   HP Color LaserJet 5550dtn and 5550hdn contents

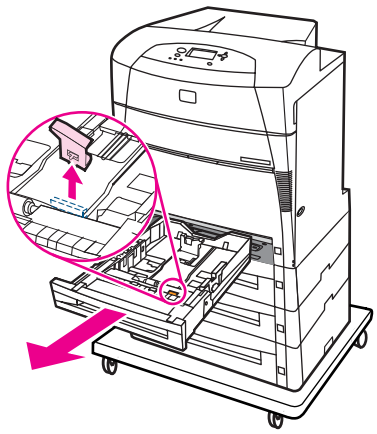
4. Assemble the ramps.



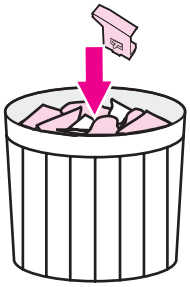
5. Remove the printer from the crate by rolling the printer down the ramps.



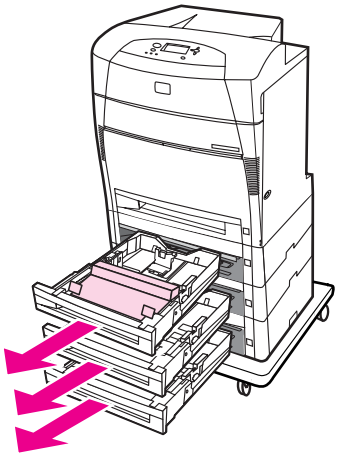
6. Remove the clip from the tray.



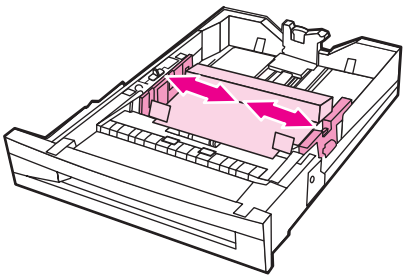
7. Discard the clip.



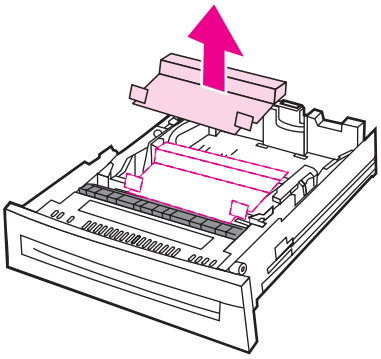
8. Remove the shipping cardboard from the optional trays.



9. Loosen the cardboard from the optional trays.



10. Lift upward and completely remove the cardboard.

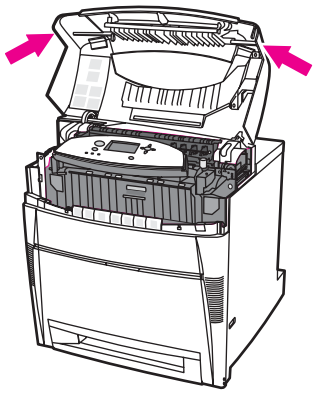


Installing print cartridges for HP Color LaserJet 5500 series printers

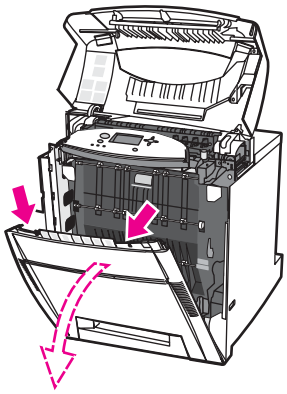
This section includes instructions for installing print cartridges.

Installing print cartridges (HP Color LaserJet 5500 series models)

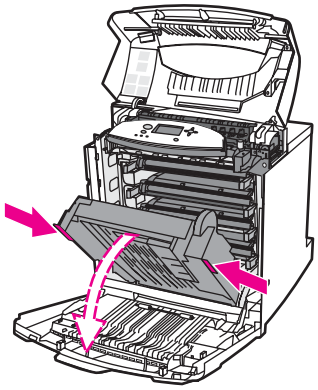
1. After a short while, the control panel displays **INSTALL SUPPLIES**. Using the side handles, open the top cover.



2. Grasp the top edge of the front cover and pull to open the front cover.

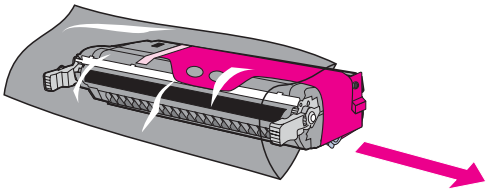


3. Grasp the green handles on either side of the transfer unit (ETB) and pull down.

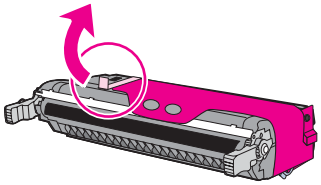


CAUTION Do not place anything on the ETB while it is open. If the ETB is punctured, print quality problems might result.

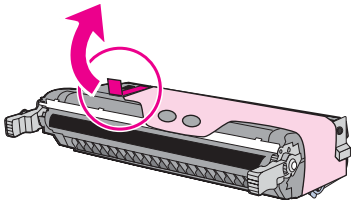
4. Remove the print cartridge from the plastic bag.



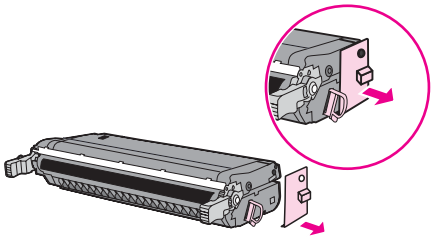
5. Remove the covering by lifting it upward.



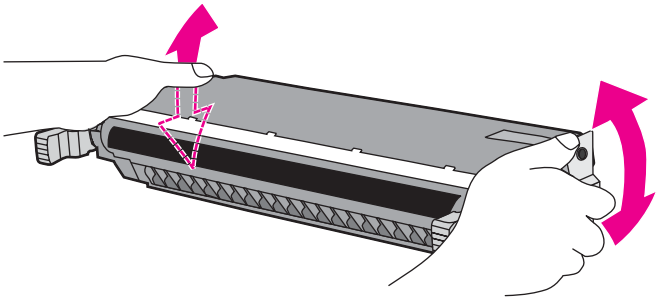
6. After removing the covering completely, discard it.



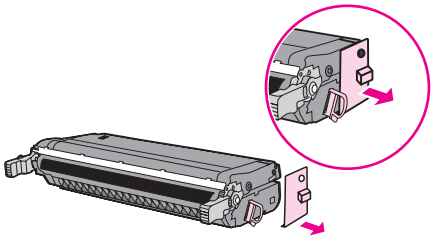
7. Remove the cover at the right side of the print cartridge.



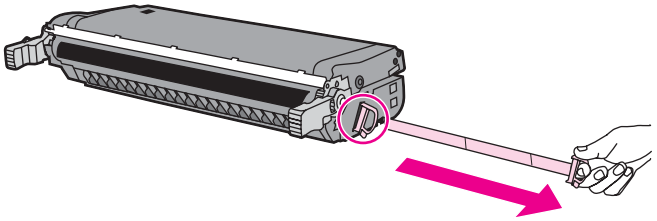
8. Grasp both sides of the cartridge and distribute the toner by gently rocking the cartridge from side to side.



9. Remove the orange shipping tape. Remove and discard the orange shipping locks.

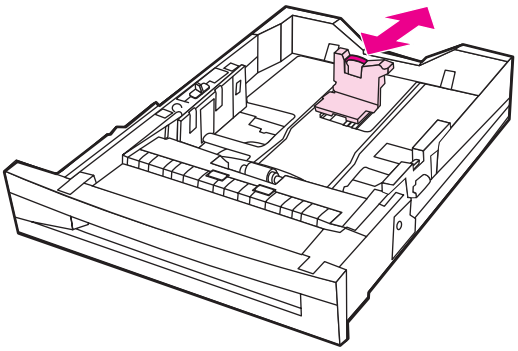


10. Remove the inside sealing tape by pulling the orange loop on the end of the cartridge and pulling the tape completely out. Discard tape.

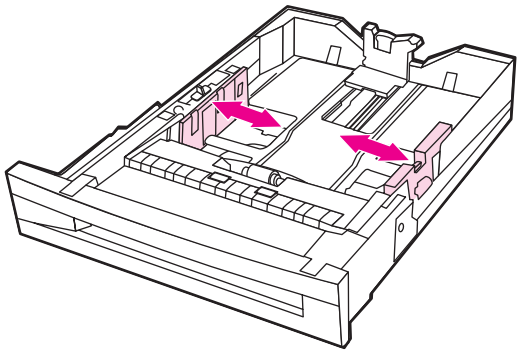


Installing paper trays (HP Color LaserJet 5500 series printers)

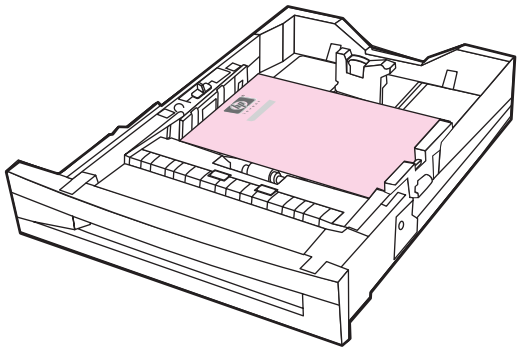
1. Adjust the rear length guide by squeezing the guide adjustment latch and sliding the back of the tray to the size of the paper being loaded.



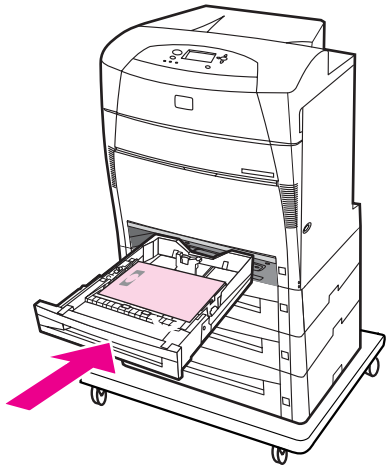
2. Slide the side guides to the desired size.



3. Load paper face-up. Load up to 500 sheets of 75 g/m^2 (20 lb) stock in the 500-sheet paper feeder trays. Capacity may vary with other paper types.



4. Insert the trays into the printer and the 500-sheet paper feeder.

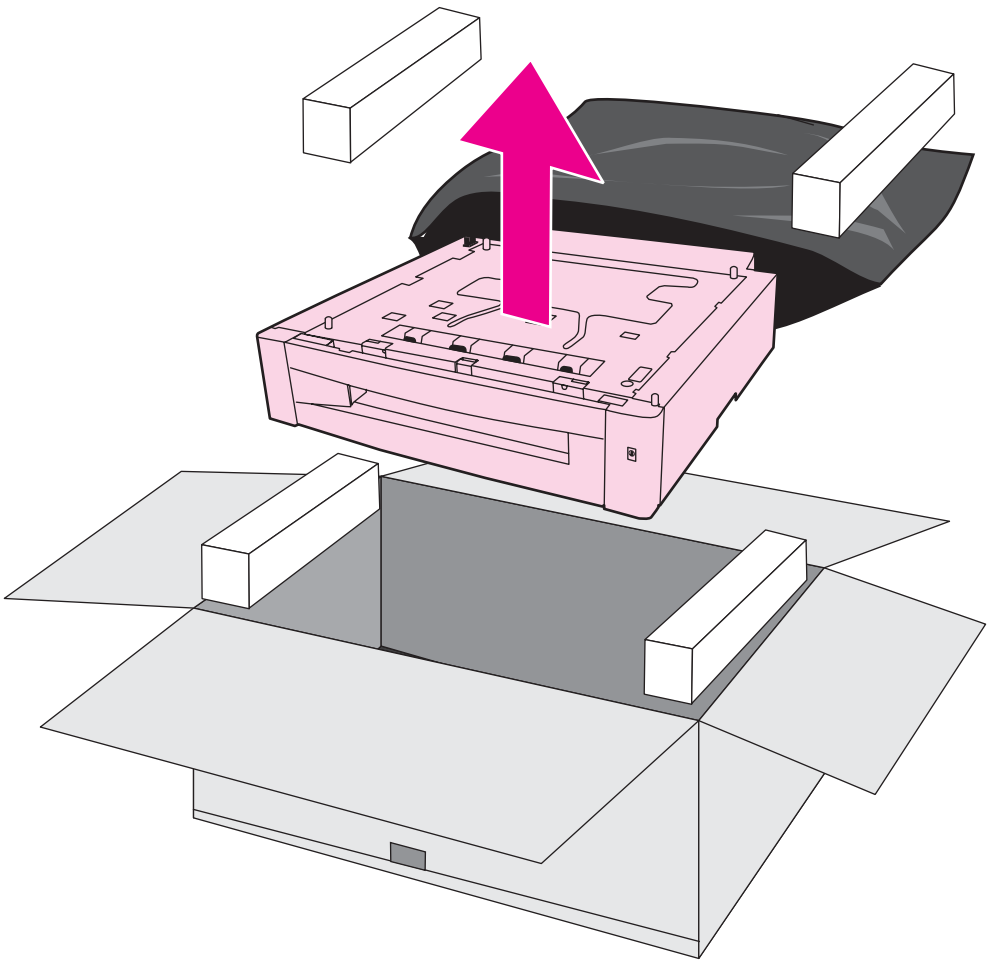


NOTE The HP Color LaserJet 5550hdn (shown above) has three 500-sheet feeders.

Installing accessories (HP Color LaserJet 5500 series printers)

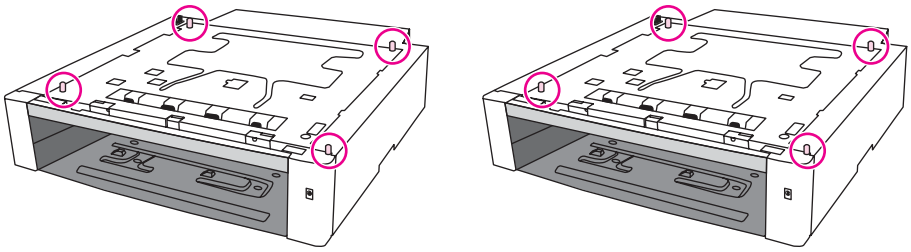
Installing optional 500-sheet feeder for HP Color LaserJet 5500 series printers.

1. Remove the optional 500-sheet feeder from the box and remove the packing materials. Save the box and packing material if you need to transport the optional 500-sheet feeder.

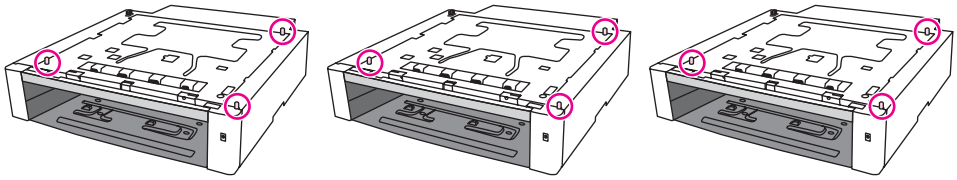


NOTE The HP Color Laser 5500dtn and 5550dtn models come standard with one optional 500-sheet feeder. HP Color LaserJet 5500hdn comes standard with two options 500-sheet feeders. The HP Color LaserJet 5550hdn comes standard with three optional 500-sheet feeders. The maximum number of options 500-sheet feeders that can be installed on HP Color LaserJet 5500 models is two. The maximum number of optional 500-sheet feeders that can be installed on HP Color LaserJet 5550 models is three.

2. Use the guide pins on the 500-sheet paper feeder to align the printer as you lower it onto the paper feeder. The HP Color LaserJet 5500 model is shown.



NOTE There are a maximum of two optional Trays and four pegs for the HP Color LaserJet 5500 models.

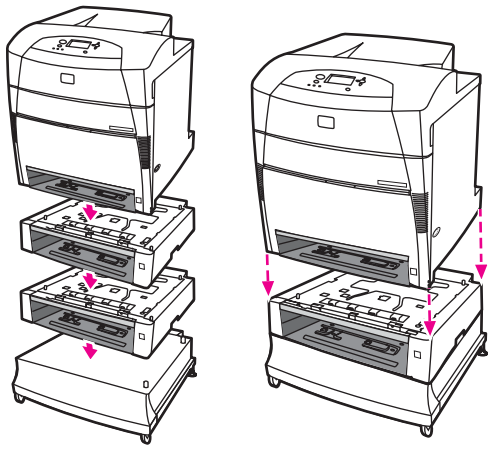


The HP Color LaserJet 5550 model is shown above.

NOTE A maximum of three trays and three pegs for HP Color LaserJet 5550 models.

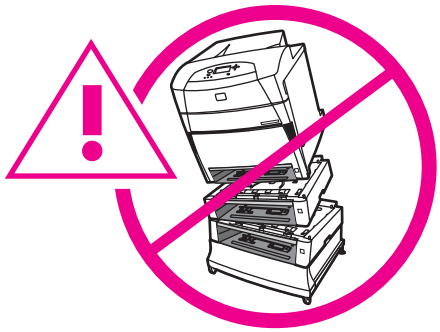
3. It takes four people to lift and move the printer. Grip the printer at the four corners and move it to the prepared location.

4. If you are installing another 500-sheet paper feeder, align the second paper feeder with the guide pins on the first paper feeder.



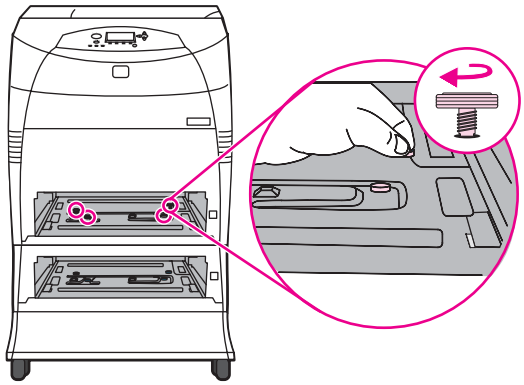
NOTE If you already have one optional 500-sheet paper feeder and you are adding a second one, you will need to unplug the printer, and detach the printer from the first 500-sheet paper feeder to install the second one.

WARNING! Use caution when stacking the 500-sheet paper feeders and the printer. Avoid tipping.



5. Insert an attachment screw into each of the four alignment holes. Using your fingers or a coin, tighten the screws to attach the printer to the optional 500-sheet feeder.

NOTE This is true for each optional 500-sheet feeder and/or printer stand.



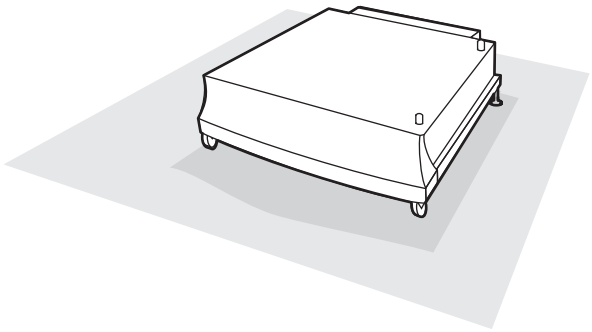
6. Gently lower the printer onto the optional 500-sheet feeder.

CAUTION Avoid bending the guide pins while lowering the printer.

NOTE The above graphic represents the HP Color LaserJet 5500/5550dtn model. The HP Color LaserJet 5500hdn has two optional 500-sheet stackable feeders and the HP Color LaserJet 5550hdn has three optional 500-sheet stackable feeders.

Installing optional printer stand (HP Color LaserJet 5500 series printers)

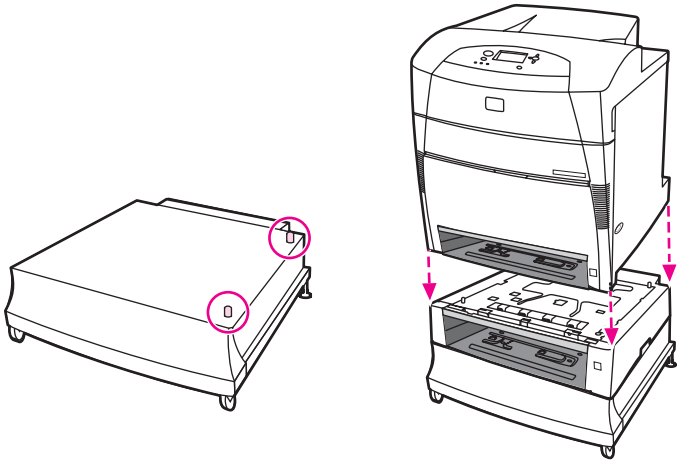
1. Place the printer stand in the prepared location.



CAUTION The prepared location must be level, sturdy, and must support all four corners of the printer stand.

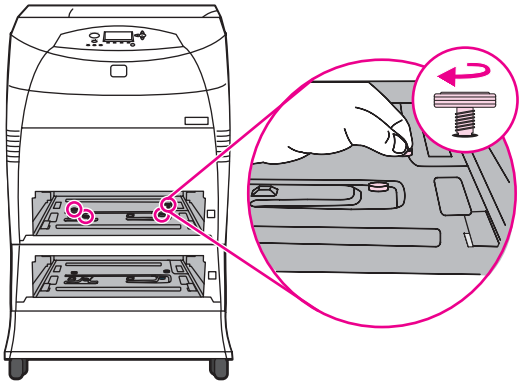
2. It takes four people to lift and move the printer. Grip the printer at the four corners and move it to the prepared location.

3. Use the guide pins on the printer stand to align the 500-sheet paper feeder as you lower it onto the printer stand.



4. Insert an attachment screw into each of the four alignment holes. Using your fingers or a coin, tighten the screws to attach the printer to the 500-sheet paper feeder.

NOTE This is true for each device sheet feeder and/or a printer stand.



5. Gently lower the printer onto the 500-sheet paper feeder.

CAUTION Avoid bending the guide pins while lowering the printer.

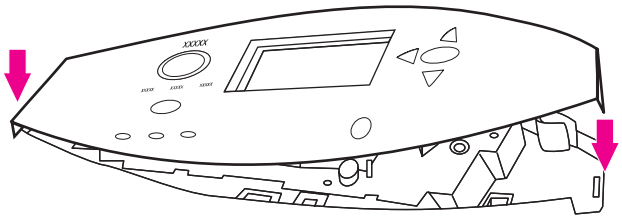
NOTE The above graphic represents the HP Color LaserJet 5500hdn model. The HP Color LaserJet 5550hdn has three 500-sheet stackable sheet feeders.

Installing a new overlay (HP Color LaserJet 5500 models)

Some printer models are shipped without the control panel overlay installed or you might prefer using a different overlay from the one that is installed. Overlays are available for several languages. If you are setting up a printer for a language other than English, follow this procedure.

1. Open the top cover. Use a small flat-blade screw driver to release the locking tabs on either side of the control-panel overlay, and then remove the overlay.

2. Position the new overlay over the top of the control panel. Insert the left tab of the overlay into the slot on the printer face. Line up the tab on the right side of the overlay with the slot on the right side of the control panel. Set the overlay in place by pushing down on the overlay near the blue button.



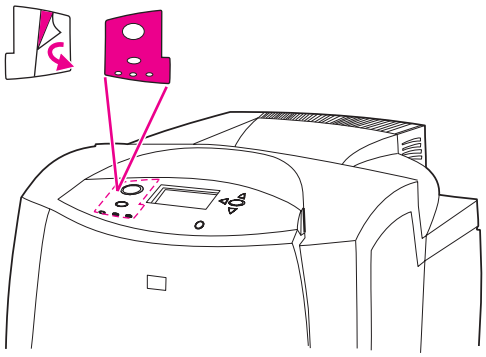
Control panel and overlay for HP Color LaserJet 5500 models only

3. Press ✔ to open the **MENUS**.
4. Press ▼ to highlight **CONFIGURE DEVICE**.
5. Press ✔ to select **CONFIGURE DEVICE**.
6. Press ▼ to highlight **SYSTEM SETUP**.
7. Press ✔ to select **SYSTEM SETUP**.
8. Press ▼ to highlight**LANGUAGE**.
9. Press ✔ to select **LANGUAGE**.
10. Press ▼ to highlight the desired language, and then press ✔ to select and save the language choice.

Installing a new control panel label (HP Color LaserJet 5550 models)

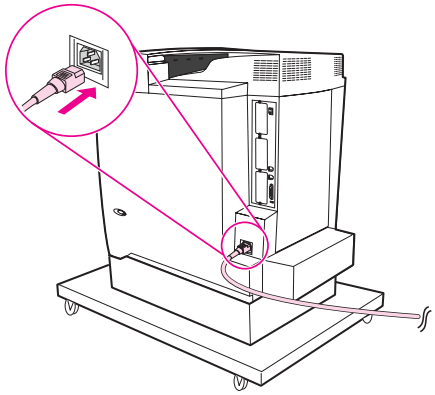
Some printer models are shipped without the control panel labels installed or you might prefer to use a different label than the one that is installed. Labels are available for several languages. If you are setting up a printer for a language other than English, follow this procedure.

1. Remove the backing from the adhesive side of the label.
2. Position the new label over the top of the control panel.
3. Press the label firmly onto the control panel.

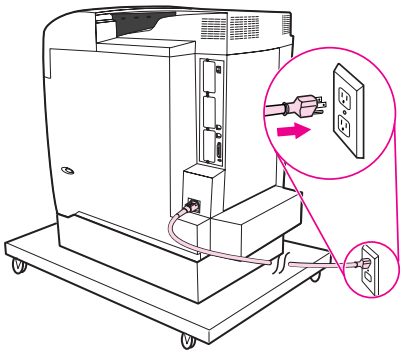


NOTE When applying the label, start at the center and press the label into place towards the edges of the control panel.

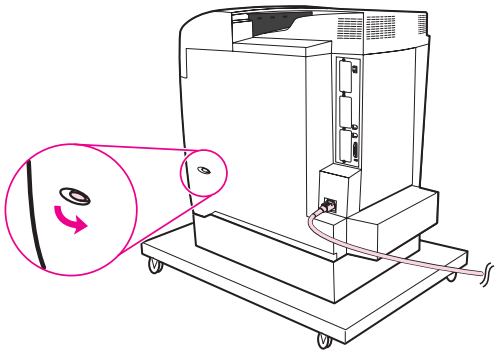
4. Plug the AC power cord into the printer.



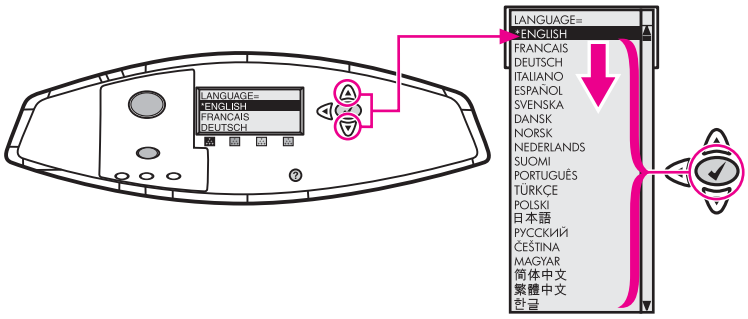
5. Plug the power cord into the outlet.



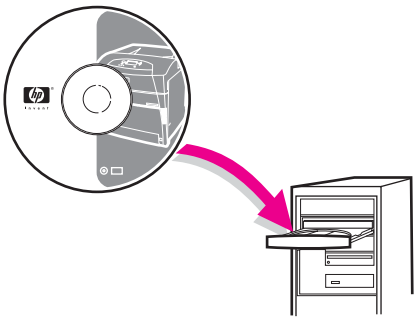
6. Turn the printer on.



7. Change the language display if necessary.



8. Insert the CD ROM into the proper drive to install the software.



9. Press MENU to open the **MENUS'**.
10. Press ▼ to highlight **CONFIGURE DEVICE**.
11. Press ✔ to select **CONFIGURE DEVICE**.
12. Press ▼ to highlight **SYSTEM SETUP**.
13. Press ✔ to select **SYSTEM SETUP**.
14. Press ▼ to highlight **LANGUAGE**.
15. Press ✔ to select **LANGUAGE**.
16. Press ▼ to highlight the desired language, and then press ✔ to select and save the language choice.

Testing the printer operation

Print a configuration page to ensure the printer is working properly.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. Press ✔ to print the configuration page.

Using PowerSave

The adjustable PowerSave Time feature reduces power consumption when the printer has been inactive for an extended period. You can set the length of time before the printer goes into PowerSave mode to **1 MINUTE**, **15 MINUTES**, **30 MINUTES**, or to **1 HOUR**, **2 HOURS**, or **4 HOURS**. The default setting is **30 MINUTES**.

NOTE The printer display dims when the printer is in PowerSave mode. PowerSave mode does not affect printer warm-up time.

To set PowerSave Time

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **POWERSAVE TIME**.
7. Press ✔ to select **POWERSAVE TIME**.
8. Press ▼ or ▼ to select the appropriate time period.
9. Press ✔ to set the time period.
10. Press PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models).

To disable/enable PowerSave

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **RESETS**.
5. Press ✔ to select **RESETS**.
6. Press ▼ to highlight **POWERSAVE**.
7. Press ✔ to select **POWERSAVE**.
8. Press ▲ or ▼ to select **ON**.
9. Press ✔ to set the selection.
10. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button.

Connecting to a computer

The HP Color LaserJet 5550 series printer supports network and parallel connections at the same time.

Parallel connections

NOTE

HP Color LaserJet 5550 models: You cannot use the parallel connection and the USB connection at the same time.

To establish a parallel connection, connect the printer to the computer by using a bidirectional parallel cable (IEEE-1284-C). Plug that connector into the printer's parallel port. The cable can be a maximum of 10 meters (30 feet) long.

When used to describe a parallel interface, the term *bidirectional* indicates that the printer is able to both receive data from the computer and send data to the computer through the parallel port.

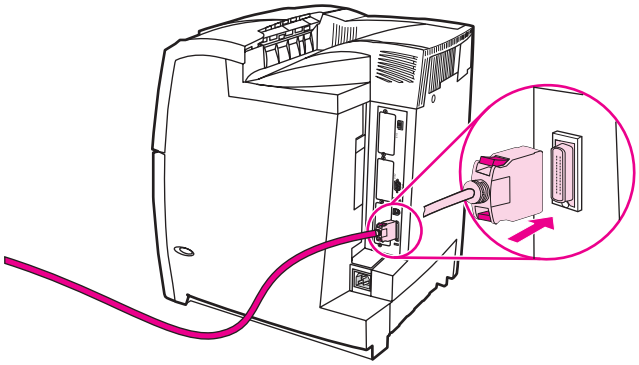


Figure 3-4. **Parallel port connection (HP Color LaserJet 5500 models)**

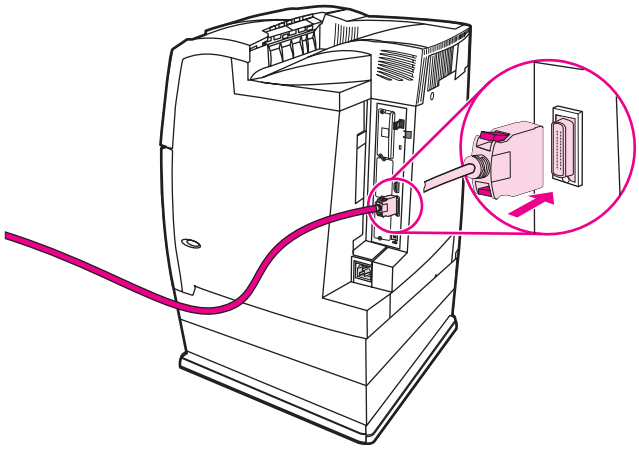


Figure 3-5. **Parallel port connection (HP Color LaserJet 5550 models)**

NOTE

To use the enhanced capabilities of the bidirectional parallel interface, ensure that the most recent printer driver is installed. These enhanced capabilities include bidirectional communication between the computer and printer, faster transfer of data, and automatic configuration of printer drivers.

USB configuration (HP Color LaserJet 5550 models)

This printer supports a USB 1.1 connection. The port is located on the back of the printer, as shown in Figure 3-6. USB connection. You must use an A-to-B type USB cable.

The network USB can be used at the same time.

NOTE USB support is not available for computers running Windows 95 or Windows NT 4.0. You cannot use the parallel connection and the USB connection at the same time.

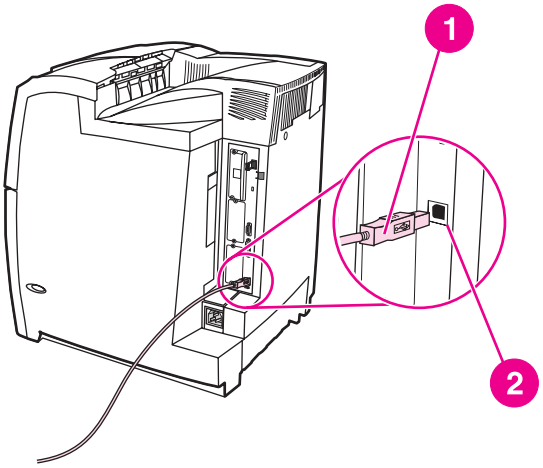


Figure 3-6. USB connection

1 USB connector
2 USB port

Auxiliary connection configuration (HP Color LaserJet 5550 models)

This printer supports an auxiliary connection for paper handling input devices. The port is located on the back of the printer, as shown in the auxiliary connection.

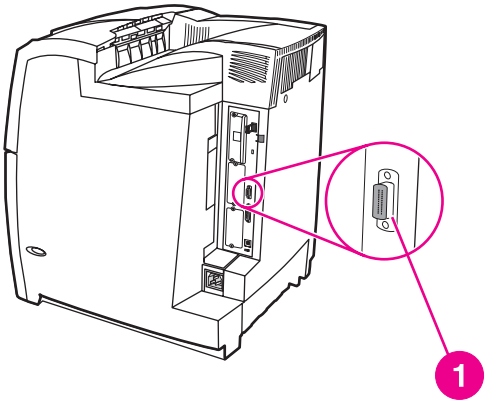


Figure 3-7. Auxiliary connection

1 Auxiliary connection port

Network connections

You may connect the printer to a network in several ways.

Direct to network

Connect one end of the network cable to the RJ-45 port. Connect the other end to the network.

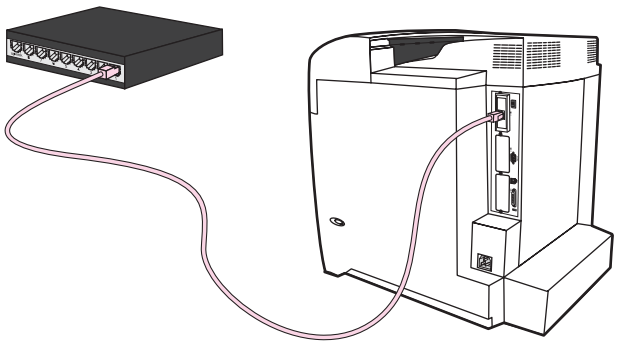


Figure 3-8. **Direct to network connection**

Network print server

Connect one end of a network cable into the server. Connect the other end to the network. Connect one end of another network cable to the printer and the other end to the network.

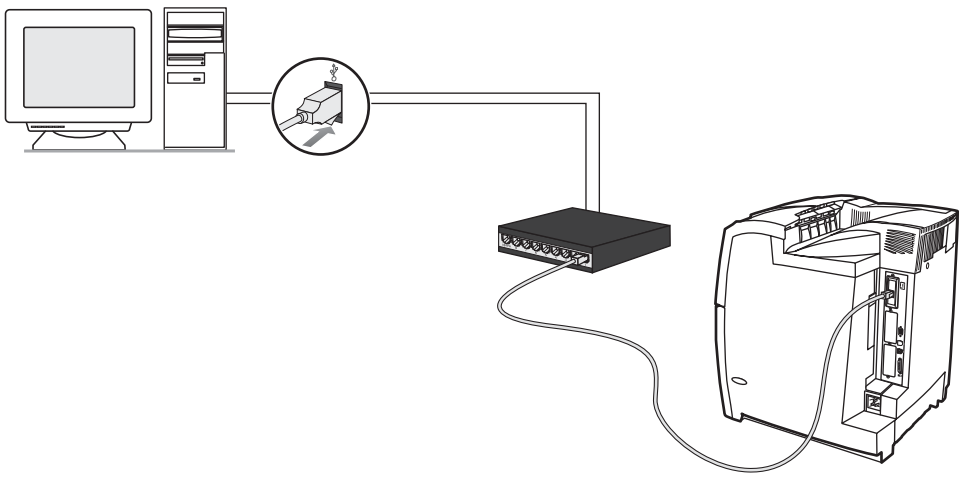


Figure 3-9. **Network print server connection**

Peer to peer (direct to network)

Connect one end of a network cable to your computer. Connect the other end to the network. Connect one end of another network cable to the printer and the other end to the network.

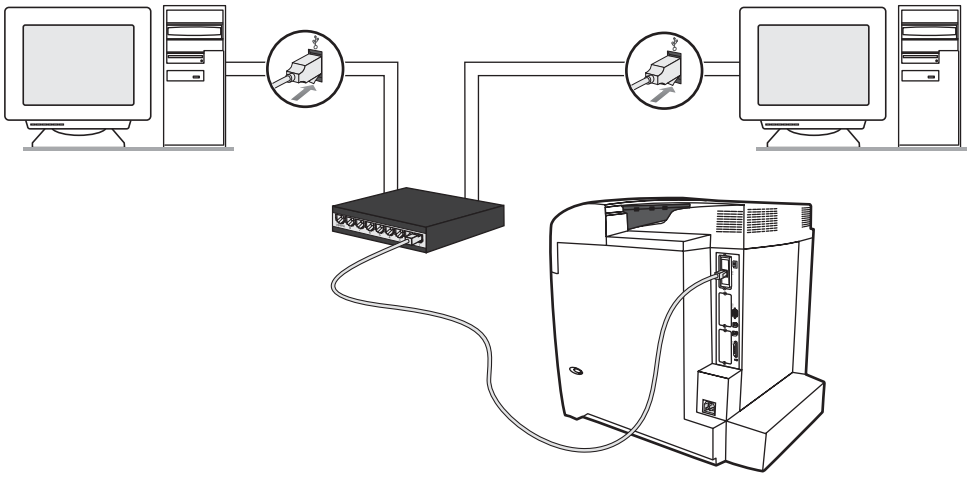


Figure 3-10. **Peer to peer connection (direct to network)**

Peer to peer (parallel)

Connect two or more computers to the network hub using network cables. Connect one end of a parallel cable to the printer. Connect the other end to a computer.

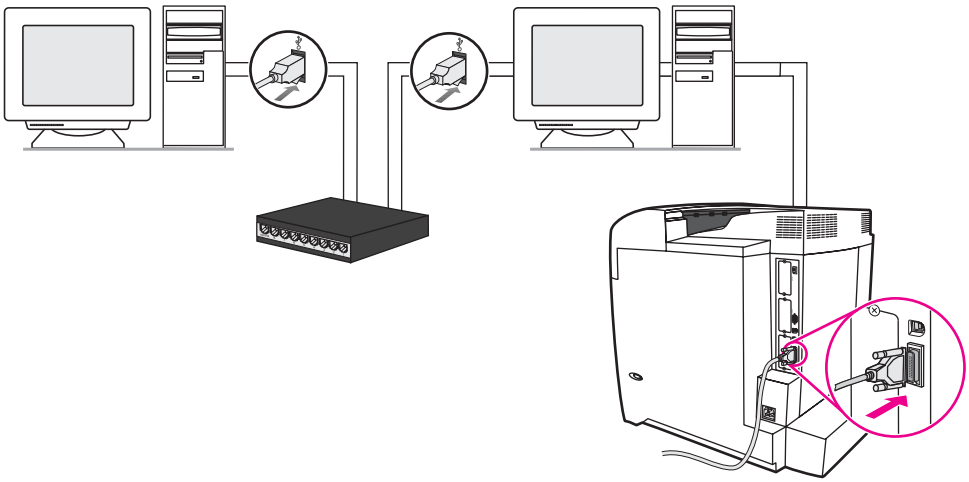


Figure 3-11. **Peer to peer connection (parallel)**

Enhanced I/O (EIO) configuration

This printer comes equipped with three enhanced input/output (EIO) slots. The three EIO slots hold compatible external devices such as the HP Jetdirect print server network cards, HP EIO hard drive, or other devices. Plugging EIO network cards into the slots increases the number of network interfaces available to the printer.

EIO network cards can maximize printer performance when you are printing from a network. In addition they provide the ability to place the printer anywhere on a network. This eliminates the need to attach the printer directly to a server or a workstation and enables you to place the printer closer to the network users.

If the printer is configured through an EIO network card, configure that card through the control panel Configure device menu.

HP Jetdirect print servers

HP Jetdirect print servers (network cards) can be installed in one of the printer's EIO slots. These cards support multiple network protocols and operating systems. HP Jetdirect print servers facilitate network management by allowing you to connect a printer directly to your network at any location. HP Jetdirect print servers also support the Simple Network Management Protocol (SNMP), which provides network managers with remote printer management and troubleshooting through HP Web Jetadmin software.

NOTE Installation of these cards and network configuration should be performed by a network administrator. Configure the card either through the control panel, the printer installation software, HP Web Jetadmin software, or Embedded Web Server.

NOTE Refer to the HP Jetdirect print server documentation for information on which external devices or EIO network cards are supported.

Available enhanced I/O interfaces

HP Jetdirect print servers (network cards) provide software solutions for:

- Novell NetWare Network
- Microsoft Windows and Windows NT networks
- Apple Mac OS (AppleTalk)
- UNIX (HP-UX and Solaris)
- Linux (Red Hat and SuSE)
- Internet printing

For a summary of available network software solutions, refer to the *HP Jetdirect Print Server Administrator's Guide*, or visit HP Customer Care online at http://www.hp.com/support/net_printing.

NetWare networks

When using Novell NetWare products with an HP Jetdirect print server, Queue Server mode provides improved printing performance over Remote Printer mode. The HP Jetdirect print server supports Novell Directory Services (NDS) as well as bindary modes. For more information, see the *HP Jetdirect Print Server Administrator's Guide*.

For Windows 95, 98, Me, NT 4.0, 2000, and XP systems, use the printer installation utility for printer setup on a NetWare network.

Windows and Windows NT networks

For Windows 98, Me, NT 4.0, 2000, and XP systems, use your printer installation utility for printer setup on a Microsoft Windows network. The utility supports printer setup for either peer-to-peer or client-server network operation.

AppleTalk networks

Use the HP LaserJet Utility to set up the printer on an EtherTalk or LocalTalk network. For more information, refer to the *HP Jetdirect Print Server Administrator's Guide* included with printers equipped with the HP Jetdirect print server.

LocalTalk configuration

Use a LocalTalk interface to print directly from a standalone Apple Macintosh computer or from a Macintosh computer on a LocalTalk network. For specific information about configuring the computer and printer to print through a LocalTalk interface, see the printer getting started guide and the *HP Jetdirect Print Server Administrator's Guide*.

NOTE For a LocalTalk configuration, the DIN-8 printer cable must be connected to the printer port on the Macintosh computer.

LocalTalk network configuration

To connect the printer to a Macintosh computer on a LocalTalk network, use the HP LocalTalk Cable Kit (part number, J4135A). You will need a kit for each printer and an additional kit for each Macintosh computer on the network.

UNIX/Linux networks

Use the HP Jetdirect printer installer for UNIX utility to set up the printer on HP-UX or Sun Solaris networks.

For setup and management on UNIX or Linux networks, use HP Web Jetadmin.

To obtain HP software for UNIX/Linux networks, visit HP Customer Care online at http://www.hp.com/support/net_printing. For other installation options supported by the HP Jetdirect print server, see the *HP Jetdirect Print Server Administrator's Guide* included with printers equipped with the HP Jetdirect print server.

Wireless printing

Wireless networks offer a safe, secure, and cost-effective alternative to traditional wired network connections.

IEEE 802.11b standard

By using the wireless HP Jetdirect 802.11b external print server, HP peripherals can be placed anywhere in the office or home and connected to a wireless network running Microsoft, Apple, Netware, UNIX, or Linux network operating systems. This wireless technology provides a high-quality printing solution without the physical constraints of wiring. Peripherals can be conveniently placed anywhere in an office or home and can be easily moved without changing network cables.

Installation is easy with the HP Install Network Printer Wizard.

HP Jetdirect 802.11b print servers are available for USB, parallel, and EIO connections. The USB connection is available only on the HP Color LaserJet 5550.

Bluetooth

NOTE

Bluetooth wireless technology[1] is not supported for the Macintosh operating system and is available only on the HP Color LaserJet 5550.

Bluetooth wireless technology[1] is a low-power, short-range radio technology that can be used to wireless connect computers, printers, personal digital assistants (PDAs), cell phones, and other devices.

Unlike infrared technology, Bluetooth's reliance on radio signals means that devices do not have to be in the same room, office, or cubicle or have an unobstructed line of sight in order to communicate. This wireless technology increases portability and efficiency within business network programs.

HP Color LaserJet 5550 printer models use a Bluetooth adapter (hp bt1300) to incorporate Bluetooth wireless technology. The adapter is available for either USB or parallel connections. The adapter has a 10-meter operation range in the 2.5 GHz ISM band and can achieve data transfer rates up to 723 Kbps. The device supports the following Bluetooth profiles:

- Hardcopy Cable Replacement Profile (HCRP)
- Serial Port Profile (SPP)
- Object Push Profile (OPP)
- Basic Imaging Profile (BIP)
- Basic Printing Profile (BPP) with xHTML-Print

[1]The Bluetooth trademarks are owned by its proprietor and used by Hewlett-Packard company under license.

Printer drivers

Printer drivers allow you to gain access to the printer features and allow the computer to communicate with the printer (using a printer language). Check the install notes, readme, and late-breaking readme files on the printer CD-ROM for additional software and languages.

The following printer drivers are included with the printer. The most recent drivers are available at http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550. Depending on the configuration of Windows-based computers, the installation program for the printer software automatically checks the computer for Internet access to obtain the latest drivers.

Other media types affect the printer settings as well: Selecting heavy or glossy media, for example, causes the printer to change the engine speed.

The printer driver also gives you customized control of color text, graphics, and photos. Use the printer driver to set the following color control options:

- Print in Grayscale
- Halftone options
- Neutral Grays
- Edge Control
- RGB Color

See the printer driver's online Help for details on color settings and their effect on printed output.

Available drivers

Printer drivers access the printer features and allow the computer to communicate with the printer. The following printer drivers are included with the printer.

NOTE PCL 5c and all NT 4.0 drivers are located on the CD only. Use the Add Printer option to load these drivers.

Table 3-1. Available printer drivers

Operating system[1]	PCL 6	PCL 5c	PS	PPD[2]
Windows 98, Me	✔	✔	✔	✔
Windows NT 4.0	✔	✔	✔	✔
Windows 2000	✔	✔	✔	✔
Windows XP	✔	✔	✔	✔
Windows Server 2003	✔	✔	✔	✔
Macintosh **OS**	✔	✔	✔	

[1]Not all printer features are available from all drivers or operating systems. See the context-sensitive help in your driver for available features.
[2]PostScript Printer Description files.

NOTE If your system did not automatically check the Internet for the latest drivers during software installation, download them from http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550. Once connected, select **Downloads and Drivers** to find the driver you wish to download.

Additional drivers

The following drivers are not included on the CD-ROM, but are available from the Internet or from HP Customer Care.

- OS/2 PS printer driver
- UNIX model scripts
- Linux drivers
- HP OpenVMS drivers

NOTE The OS/2 drivers are available from IBM and are packaged with OS/2. They are not available for Traditional Chinese, Simplified Chinese, Korean, or Japanese.

Select the right printer driver for your needs

Select a printer driver based on the way that you use the printer. Certain printer features are available only in the PCL 6 drivers. See the printer driver Help for available features.

- Use the PCL 6 driver to take full advantage of printer features. For general office printing, the PCL 6 driver is recommended to provide optimum performance and print quality.
- Use the PCL 5c driver (available on the CD using Add Printer) if backward compatibility with previous PCL printer drivers or older printers is necessary.
- Use the PS driver if you are printing primarily from PostScript-specific programs such as Adobe and Corel, for compatibility with PostScript Level 3 needs, or for PS font DIMM support.

NOTE The printer automatically switches between PS and PCL printer languages.

Printer driver Help

Each printer driver has Help screens that can be activated by using the Help button, the F1 button on the computer keyboard, or a question-mark symbol in the upper-right corner of the printer driver (depending on the Windows operating system used). These Help screens give detailed information about the specific driver. Printer driver Help is separate from your program Help.

Software for Macintosh computers

The HP installer provides PostScript Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP LaserJet Utility for use with Macintosh computers.

The embedded Web server can be used by Macintosh computers if the printer is connected to a network.

PPDs

Use PPDs, in combination with the Apple PostScript drivers, to gain access to the printer features and to allow the computer to communicate with the printer. An installation program for the PPDs, PDEs, and other software is provided on the CD-ROM. Use the appropriate PS driver that comes with the operating system.

HP LaserJet Utility

Use the HP LaserJet Utility to control features that are not available in the driver. The illustrated screens make selecting printer features easier to use. Use the HP LaserJet Utility to do the following:

- Name the printer, assign it to a zone on a network, and download files and fonts.
- Configure and set the printer for Internet protocol (IP) printing.

NOTE The HP LaserJet Utility is not currently supported for OS X, but the utility is supported for the Classic environment.

Installing the printing system software

The following sections contain instructions for installing the printing system software.

The printer comes with printing system software and printer drivers on a CD-ROM. The printing system software on the CD-ROM must be installed in order to take full advantage of the printer features.

If you do not have access to a CD-ROM drive, you can download the printing system software from the Internet at www.hp.com/support/clj5500 or www.hp.com/support/clj5550.

NOTE Sample model scripts for UNIX (HP-UX, Sun Solaris) and Linux networks are available for download at www.hp.com/support.

You can download the latest software free of charge at www.hp.com/support/clj5500 or www.hp.com/support/clj5550.

Installing Windows printing system software for direct connections

NOTE Only the HP LaserJet 5550 models support the USB cable connection described in this section.

This section explains how to install the printing system software for Microsoft Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP.

When installing the printing software in a direct-connect environment, always install the software before connecting the parallel or USB cable. If the parallel or USB cable was connected before the software installation, see Installing the software after the parallel or USB cable has been connected.

Either a parallel or USB cable can be used for the direct connection. However, you cannot connect both the parallel and USB cable at the same time. Use an IEEE 1284-C cable or a standard 2-meter USB cable.

NOTE Windows NT 4.0 does not support USB cable connections.

To install the printing system software

1. Close all software programs that are open or running.
2. Insert the printer CD-ROM into the CD-ROM drive.

   If the welcome screen does not open, start it by using the following procedure:

   - On the **Start** menu, click **Run**.
   - Type the following: x:\setup (where x is the letter of the CD-ROM drive).
   - Click **OK**.
3. When prompted, click **Install Printer** and follow the instructions on the computer screen.
4. Click **Finish** when the installation has been completed.
5. You might need to restart the computer.
6. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

If installation fails, reinstall the software. If this fails, check the installation notes and Readme files on the printer CD-ROM or the flyer that came in the printer box, or go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550 for help or more information.

Installing Windows printing system software for networks

The software on the printer CD-ROM supports network installation with a Microsoft network. For network installation on other operating systems, go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550.

The HP Jetdirect print server that is included with the HP LaserJet 5550n, HP LaserJet 5550dn, or HP LaserJet 5550dtn printer has a 10/100 Base-Tx network port. If you need an HP Jetdirect print server with another type of network port, go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550.

The installer does not support printer installation or printer object creation on Novell servers. It supports only direct-mode network installations between Windows computers and a printer. To install your printer and create objects on a Novell server, use an HP utility (such as HP Web Jetadmin or HP Install Network Printer Wizard) or a Novell utility (such as NWadmin).

To install the printing system software

1. If you are installing the software on Windows NT 4.0, Windows 2000, or Windows XP, make sure that you have administrator privileges.
2. Make sure that the HP Jetdirect print server is configured correctly for the network by printing a configuration page. On the second page, locate the printer IP address. You might need this address to complete network installation.
3. Close all software programs that are open or running.
4. Insert the printer CD-ROM into the CD-ROM drive.

   If the welcome screen does not open, start it by using the following procedure:

   - On the **Start** menu, click **Run**.
   - Type the following: x:\setup (where x is the letter of the CD-ROM drive).
   - Click **OK**.
5. When prompted, click **Install Printer** and follow the instructions on the computer screen.
6. Click **Finish** when the installation has been completed.
7. You might need to restart the computer.
8. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

NOTE If installation fails, reinstall the software. If this fails, check the installation notes and Readme files on the printer CD-ROM or the flyer that came in the printer box, or go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550 for help or more information.

To set up Windows-sharing to use the printer on a network

If the printer is directly connected to a computer with a parallel cable, you can share the printer on the network so that other network users can print to it.

See your Windows documentation to make Windows-sharing available. After the printer is shared, install the printer software on all computers that share the printer.

Installing Macintosh printing system software for networks

This section describes how to install Macintosh printing system software. The printing system software supports Apple Mac OS version 9.1.x and later.

The printing system software includes the following components:

- **PostScript Printer Description (PPD) files**

  The PPDs, in combination with the Apple PostScript printer drivers, provide access to printer features. An installation program for the PPDs and other software is provided on the CD-ROM that came with the printer. Use the appropriate PS driver that comes with the operating system.

- **HP LaserJet Utility**

  The HP LaserJet Utility provides access to features that are not available in the printer driver. Use the illustrated screens to select printer features and complete the following tasks with the printer:

  - Name the printer.
  - Assign the printer to a zone on the network.
  - Assign an IP to the printer.
  - Download files and fonts.
  - Configure and set the printer for IP or AppleTalk printing.

NOTE The HP LaserJet Utility is not currently supported for OS X, but the utility is supported for the Classic environment.

To install printer drivers from Mac OS 9.1X and later

1. Connect the network cable between the HP Jetdirect print server and a network port.
2. Insert the CD-ROM into the CD-ROM drive. The CD-ROM menu runs automatically. If the CD-ROM menu does not run automatically, double-click the CD-ROM icon on the desktop, and then double-click the Installer icon. This icon is located in the Installer/<language> folder of the Starter CD-ROM (where <language> is your language preference). For example, the Installer/English folder contains the Installer icon for the English printer software.
3. Follow the instructions on the computer screen.
4. Open the Apple Desktop Printer Utility located in the {Startup Disk}:Applications: Utilities folder.
5. Double-click **Printer (AppleTalk)**.
6. Next to AppleTalk Printer Selection, click **Change**.
7. Select the printer, click **Auto Setup**, and then click **Create**.
8. On the **Printing** menu, click **Set Default Printer**.

NOTE The icon on the desktop will appear to be generic. All the print panels appear in the **Print** dialog box in a program.

To install printer drivers from Mac OS 10.X

1. Connect the network cable between the HP Jetdirect print server and a network port.
2. Insert the CD-ROM into the CD-ROM drive. The CD-ROM menu runs automatically. If the CD-ROM menu does not run automatically, double-click the CD-ROM icon on the desktop, and then double-click the Installer icon. This icon is located in the Installer/<language> folder of the Starter CD-ROM (where <language> is your language preference). (For example, the Installer/English folder contains the Installer icon for the English printer software.)
3. Double-click the **HP LaserJet Installers** folder.
4. Follow the instructions on the computer screen.
5. Double-click the Installer icon for the desired language.
6. On your computer, double-click **Applications**, **Utilities**, and then **Print Center**.
7. Click **Add Printer**.
8. Select the AppleTalk connection type on OS X 10.1 and the Rendezvous connection type on OS X 10.2.
9. Select the printer name.
10. Click **Add Printer**.
11. Close the Print Center by clicking the **Close** button in the upper-left corner.

NOTE Macintosh computers cannot be connected directly to the printer using a parallel port.

Installing Macintosh printing system software for direct connections (USB, HP Color LaserJet 5550 models)

NOTE Macintosh computers do not support parallel port connections.

This section explains how to install the printing system software for Mac OS 9.X and later.

The Apple LaserWriter driver must be installed to use the PPD files. Use the Apple LaserWriter 8 driver that came with your Macintosh computer.

To install the printing system software

1. Connect a USB cable between the USB port on the printer and the USB port on the computer. Use a standard 2-meter USB cable.
2. Close all software programs that are open or running.
3. Insert the printer CD-ROM into the CD-ROM drive and run the installer.

   The CD-ROM menu runs automatically. If the CD-ROM menu does not run automatically, double-click the CD-ROM icon on the desktop, and then double-click the Installer icon. This icon is located in the Installer/<language> folder of the Starter CD-ROM (where <language> is your language preference).
4. Follow the instructions on the computer screen.
5. Restart the computer.

6. **For Mac OS 9.X and later**:
   - From HD/Applications/Utilities, open the Apple Desktop Printer Utility.
   - Double-click **Printer (USB)**.
   - Next to **USB Printer Selection**, click **Change**.
   - Select the printer, click **Auto Setup**, and then click **Create**.
   - Click the Desktop Printer Icon that was just created.
   - On the **Printing** menu, click **Set Default Printer**.

   For Mac OS X: From HD/Applications/Utilities/Print Center, start the Print Center. If the printer does not set up automatically, do the following:
   - Click **Add Printer**.
   - From within the printer list, select USB as the connection type.
   - Select the printer and click **Add** in the lower-left corner.
7. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

NOTE If installation fails, reinstall the software. If this fails, see the installation notes or Readme files on the printer CD-ROM or the flyer that came in the printer box, or go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550 for help or more information.

NOTE The icon on the desktop will appear to be generic. All the print panels appear in the **PRINT** dialog box in a program.

Installing the software after the parallel or USB cable has been connected

NOTE Only the HP LaserJet 5550 model supports the USB cable connection described in this section.

If you have already connected a parallel or USB cable to a Windows computer, the **New Hardware Found** dialog box appears when you turn on the computer.

To install the software for Windows 98 or Windows Me

1. In the **New Hardware Found** dialog box, click **Search CD-ROM drive**.
2. Click **Next**.
3. Follow the instructions on the computer screen.
4. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

NOTE If installation fails, reinstall the software. If this fails, check the installation notes and Readme files on the printer CD-ROM or the flyer that came in the printer box, or go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550 for help or more information.

To install the software for Windows 2000, Windows XP, or Windows 2003

1. In the **New Hardware Found** dialog box, click **Search**.
2. On the **Locate Driver Files** screen, select the **Specify a Location** check box, click to clear all of the other check boxes, and then click **Next**.
3. Type the letter for the root directory. For example, X:\ (where "X:\" is the letter of the root directory on the CD-ROM drive).
4. Click **Next**.
5. Follow the instructions on the computer screen.
6. Click **Finish** when the installation has been completed.
7. Select a language and follow the instructions on the computer screen.
8. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

NOTE If installation fails, reinstall the software. If this fails, check the installation notes and Readme files on the printer CD-ROM or the flyer that came in the printer box, or go to www.hp.com/support/clj5500 or www.hp.com/support/clj5550 for help or more information.

Network configuration

You might need to configure certain network parameters on the printer. You can configure these parameters from the printer control panel, the embedded Web server, or for most networks, from the HP Web Jetadmin software (or the HP LaserJet Utility for Macintosh).

NOTE For more information about using the HP Toolbox, see Using the HP Toolbox (HP Color LaserJet 5550 models).

For a complete list of supported networks and for instructions on configuring network parameters from software, see the *HP Jetdirect Print Server Administrator's Guide*. The guide comes with printers in which an HP Jetdirect print server is installed.

This section contains the following instructions for configuring network parameters from the printer control panel:

- Configuring TCP/IP parameters
- Disabling unused network protocols
- Configuring Novell NetWare frame type parameters

Configuring Novell NetWare frame type parameters

The HP Jetdirect 615N (HP Color LaserJet 5500) or the 620N (HP Color LaserJet 5550) print server automatically selects a NetWare frame type. Select a frame type manually only when the print server selects an incorrect frame type. To identify the frame type chosen by the HP Jetdirect print server, print a configuration page from the printer control panel.

To configure the Novell NetWare parameters from the printer control panel

1. Press ✔ (HP Color LaserJet 5500 models) or MENU(HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **IPX/SPX**.
9. Press ✔ to select **IPX/SPX**.
10. Press ▼ to highlight **FRAME TYPE**.
11. Press ▼ to highlight the desired frame type.
12. Press ✔ to select the frame type.
13. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the Ready state.

HP Web Jetadmin

Use HP Web Jetadmin to manage HP Jetdirect connected printers within your intranet by using a browser. HP Web Jetadmin is a browser-based management tool, and should be installed only on a single network administration server. It can be installed and run on Red Hat Linux; Suse Linux; Windows NT 4.0 Server and Workstation; Windows 2000 Professional, Server, and Advanced Server; and Windows XP Professional Service Pack 1 systems.

To download a current version of HP Web Jetadmin and for the latest list of supported host systems, visit HP Customer Care Online at www.hp.com/go/webjetadmin.

When installed on a host server, any client can open HP Web Jetadmin through a supported Web browser (such as Microsoft Internet Explorer 5.5 and 6.0 or Netscape Navigator 7.0).

HP Web Jetadmin has the following features:

- The task-oriented user interface provides configurable views, saving network managers significant time.
- Customizable user profiles let network administrators include only the function that is viewed or used.
- Instant e-mail notification of hardware failure, low supplies, and other printer problems can be routed to different people.
- Remote installation and management is available from anywhere by using only a standard Web browser.
- Advanced autodiscovery locates peripherals on the network, without manually entering each printer into a database.
- The software accommodates simple integration into enterprise management packages.
- You can quickly find peripherals based on parameters such as IP address, color capability, and model name.
- You can easily organize peripherals into logical groups, with virtual office maps for easy navigation.
- You can manage and configure multiple printers at one time.

For the latest information about HP Web Jetadmin go to www.hp.com/go/webjetadmin.

UNIX

The HP Jetdirect Printer Installer for UNIX is a simple printer installation utility for HP-UX and Solaris networks. It is available for download from HP Customer Care Online at www.hp.com/support/net_printing.

Utilities

HP Color LaserJet 5500 series printers are equipped with several utilities that make them easy to monitor and manage on a network.

Embedded Web server

This printer is equipped with an embedded Web server that provides access to information about printer and network activities. A Web server provides an environment in which Web programs can run, in much the same way that an operating system, such as Windows, provides an environment in which programs can run, on your computer. The output from these programs can then be viewed in a Web browser, such as Microsoft Internet Explorer or Netscape Navigator.

When a Web server is "embedded," it resides on a hardware device (such as a printer) or in firmware, rather than being available as software that is loaded on a network server.

The advantage of an embedded Web server is that it provides an interface to the printer that anyone who has a network-connected computer or a standard Web browser can use. There is no special software to install or configure. For more information about the HP embedded Web server, see the *Embedded Web Server User Guide*. You can find this guide on the CD-ROM that is included with the printer.

Features

Use the HP embedded Web server to view printer and network card status and manage printing functions from your computer. With the HP embedded Web server, you can do the following:

- View printer status information.
- Determine the remaining life on all supplies and order new ones.
- View and change tray configurations.
- View and change the printer control panel menu configuration.
- View and print internal pages.
- Receive notification of printer and supplies events.
- Add or customize links to other Web sites.
- Select the language in which to show the embedded Web server pages.
- View and change network configuration.

HP Toolbox (HP Color LaserJet 5550 models)

The HP Toolbox is a software program that can be used for the following tasks:

- Check the printer status.
- View troubleshooting information.
- View online documentation.
- Print internal printer pages.

You can view the HP Toolbox when the printer is directly connected to your computer or when it is connected to a network. You have to perform a complete software installation before you can use the HP Toolbox.

Other components and utilities

Several software programs are available for Windows and Macintosh users, as well as for network administrators. These programs are summarized in the following table.

Table 3-2. Components and utilities

Windows	Macintosh OS	Network administrator
• Software installer — automates the printing system installation • Online Web registration • HP Toolbox (HP Color LaserJet 5550 models)	• PostScript Printer Description files (PPDs) — for use with the Apple PostScript drivers that comes with the Mac OS • HP LaserJet Utility (available from the Internet) — a printer management utility for Mac OS users • HP Toolbox (for Mac OS X V10.2 and later; HP Color LaserJet 5550 models)	• HP Web Jetadmin — a browser-based system management tool. See www.hp.com/go/webjetadmin for the latest HP Web Jetadmin software • HP Jetdirect Printer Installer for UNIX — available for download from www.hp.com/support/net_printing

Configuring TCP/IP parameters

You can use the printer control panel to configure the following TCP/IP parameters:

- Usage of the BOOTP file for configuration parameters (the default is to use the BOOTP file)
- IP address (4 bytes)
- Subnet mask (4 bytes)
- Default gateway (4 bytes)
- Idle TCP/IP connection timeout (in seconds)

To automatically configure TCP/IP parameters from the printer control panel

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **TCP/IP**.
9. Press ✔ to select **TCP/IP**.
10. Press ✔ to select **CONFIG METHOD**.

11. Press ▼ to highlight **AUTO IP**.
12. Press ✔ to select **AUTO IP**.
13. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

To manually configure TCP/IP parameters from the printer control panel

Use manual configuration to set an IP address, subnet mask, and local and default gateway.

Setting an IP address

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ✔ to select **EIO X**.
7. Press ▼ to highlight **TCP/IP**.
8. Press ✔ to select **TCP/IP**.
9. Press ▼ to highlight **MANUAL SETTINGS**.
10. Press ✔ to select **MANUAL SETTINGS**.
11. Press ▼ to highlight **MANUAL**.
12. Press ✔ to highlight **IP ADDRESS**.
13. Press ✔ to select **IP ADDRESS**.

NOTE The first of three sets of numbers is highlighted. If there is not a number highlighted, a highlighted empty underscore appears.

14. Press ▲ or ▼ to increase or decrease the number for configuring the IP address.
15. Press ✔ to move to the next set of numbers.
16. Repeat steps 15 and 16 until the correct IP address is entered.
17. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting the subnet mask

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).

7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **TCP/IP**.
9. Press ✔ to select **TCP/IP**.
10. Press ▼ to highlight **MANUAL SETTINGS**.
11. Press ✔ to select **MANUAL SETTINGS**.
12. Press ▼ to highlight **SUBNET MASK**.
13. Press ✔ to select **SUBNET MASK**.

NOTE The first of three sets of numbers is highlighted.

14. Press or ▼ to increase or decrease the number for configuring the subnet mask.
15. Press ✔ to move to the next set of numbers.
16. Repeat steps 14 and 15 until the correct subnet mask is entered.
17. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting the syslog server

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ✔ to highlight **TCP/IP**.
9. Press ▼ to highlight **MANUAL SETTINGS**.
10. Press ✔ to select **MANUAL SETTINGS**.
11. Press ▼ to highlight **SYSLOG SERVER**.
12. Press ✔ to select **SYSLOG SERVER**.

NOTE The first of four sets of numbers are the default settings. Each set of numbers represents one byte of information and has a range from 0 to 255.

13. Press the ▼ or ▼ arrow to increase or decrease the number for the first byte of the default gateway.
14. Press ✔ to move to the next set of numbers. (Press ⮌ to move to the previous set of numbers.)
15. Repeat steps 13 and 14 until the correct subnet mask is entered.
16. Press ✔ to save the syslog server.
17. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting the local and default gateway

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **TCP/IP**.
9. Press ✔ to select **TCP/IP**.
10. Press ▼ to highlight **MANUAL SETTINGS**.
11. Press ✔ to select **MANUAL SETTINGS**.
12. Press ▼ to highlight **LOCAL GATEWAY** or **DEFAULT GATEWAY**.
13. Press ✔ to select **LOCAL GATEWAY** or **DEFAULT GATEWAY**.

NOTE The first of three sets of numbers are the default settings. If there is not a number highlighted, a highlighted empty underscore appears.

14. Press ▲ or ▼ to increase or decrease the number for configuring **LOCAL** or **DEFAULT GATEWAY**.
15. Press ✔ to move to the next set of numbers.
16. Repeat steps 15 and 16 until the correct subnet mask is entered.
17. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Disabling network protocols (optional)

By factory default, all supported network protocols are enabled. Disabling unused protocols has the following benefits:

- Decreases printer-generated network traffic.
- Prevents unauthorized users from printing to the printer.
- Provides only pertinent information on the configuration page.
- Allows the printer control panel to display protocol-specific error and warning messages.

NOTE TCP/IP configuration cannot be disabled on the HP Color LaserJet 5550 series printer.

To disable IPX/SPX

NOTE Do not disable this protocol if Windows 95/98, Windows NT, ME, 2000, and XP users will be printing to the printer.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.

2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **IPX/SPX**.
9. Press ✔ to select **IPX/SPX**.
10. Press ▼ to highlight **ENABLE**.
11. Press ✔ to select **ENABLE**
12. Press ▼ to highlight **ON** or **OFF**.
13. Press✔ to select **ON** or **OFF**.
14. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

To disable DLC/LLC

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ▼ to highlight **DLC/LLC**.
9. Press ✔ to select **DLC/LLC**.
10. Press ▼ to highlight **ENABLE**.
11. Press ✔ to select **ENABLE**.
12. Press ▼ to highlight **ON** or **OFF**.
13. Press ✔ to select **ON** or **OFF**.
14. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting the idle timeout

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ✔ to highlight **TCP/IP**.
9. Press ▼ to highlight **MANUAL SETTINGS**.
10. Press ✔ to select **MANUAL SETTINGS**.
11. Press ▼ to highlight **IDLE TIMEOUT**.
12. Press ✔ to select **IDLE TIMEOUT**.
13. Press the ▲ or ▼ arrow to to increase or decrease the number of seconds for the idle timeout.
14. Press ✔ to save the idle timeout.
15. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting the link speed

By factory default, the link speed is set to **AUTO**. Use the following procedure to set a specific speed:

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EIO X** (where X = 1, 2, or 3).
7. Press ✔ to select **EIO X**.
8. Press ✔ to highlight **LINK SPEED**.
9. Press ▼ to select **LINK SPEED**.
10. Press ▼ to highlight the desired link speed.
11. Press ✔ to select the desired link speed.
12. Press the PAUSE/RESUME (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) button to return to the **Ready** state.

Setting network security on the printer

This printer features control panel locking, which allows network administrators to prevent users from changing certain printer control panel settings. When a menu is locked, unauthorized users trying to change settings in the printer control panel will receive the following message:

Access Denied

MENUS LOCKED

You can use HP Web Jetadmin software, the HP LaserJet Utility for Macintosh, or an ASCII escape sequence to perform this procedure. For instructions on locking the printer control panel using either the HP Web Jetadmin software or the HP LaserJet Utility for Macintosh, see the online Help for these utilities.

Locking the control panel

You can prevent users from changing printer control panel settings by establishing a password and locking the printer control panel. You can choose from multiple levels of security. You can lock certain control panel menus, allowing users to change the rest of the menus, or you can lock all of the menus—and you can even lock the STOP JOB button on the HP Color LaserJet 5550 or the CANCEL JOB button on the HP Color LaserJet 5500.

Levels of security

Table 3-3. Printer security levels

Lock setting	Control panel items locked
OFF	Service menu (locked with factory set PIN)
LOW	I/O submenu System setup submenu Resets submenu Service menu (locked with factory set PIN)
MEDIUM	Configure Device menu (including all submenus) Diagnostics menu Service menu (locked with factory set PIN)
HIGH	Information menu Paper Handling menu Configure Device menu (including all submenus) Diagnostics menu Service menu (locked with factory set PIN) STOP JOB button on HP Color LaserJet 5550 models or the CANCEL JOB button on HP Color LaserJet 5500 models

Use HP Web Jetadmin software, HP LaserJet Utility for Macintosh, or an ASCII escape sequence to set security. HP software, which comes on the software CD ROM, is easier to use than an ASCII escape sequence. For instructions about locking the control panel by using either HP Web Jetadmin software or the HP LaserJet Utility for Macintosh, go to the online Help for that software.

Using an ASCII PJL escape sequence to set network security

If you decide to use the ASCII escape sequence, you must use an MS-DOS® or Windows ASCII editor to create the commands. The commands must also be sent to the printer by using a DOS COPY command or an ASCII file download utility. The *PJL Technical Reference Manual* is located on CD-ROM, part number 5961-0976. Order a copy of this manual from the HP website: http://www.hp.com.

NOTE

In the following examples, EC represents the escape character. For more information on using escape characters, see the *PJL Technical Reference Manual*.

- To lock or unlock the printer control panel if a password has not been set, send the following ASCII sequence to the printer:

  ```
  EC%-12345X@PJL JOB
  @PJL DEFAULT CPLOCK=NONE
  (or MINIMUM, MODERATE, or MAXIMUM)
  @PJL EOJ
  EC%-12345X
  ```

- To set the password, send the following ASCII sequence to the printer:

  ```
  EC%-12345X@PJL JOB
  @PJL DEFAULT PASSWORD=[numeric password (0 to 65535)]
  @PJL EOJ
  EC%-12345X
  ```

- To lock or unlock the control panel if the password has been set, send the following ASCII sequence to the printer:

  ```
  EC%-12345X@PJL JOB PASSWORD=(numeric password)
  @PJL DEFAULT CPLOCK=NONE
  (or MINIMUM, MODERATE, or MAXIMUM)
  @PJL EOJ
  EC%-12345X
  ```

4 Printer maintenance

This chapter contains information for the following maintenance topics.

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Cleaning the printer and accessories

Clean the outside surfaces with a water-dampened cloth. Observe the warning and caution below.

WARNING! Before you begin these steps, turn the printer off and unplug all power cords to avoid shock hazard.

Be careful when cleaning around the fuser area. It might be hot.

CAUTION To avoid permanent damage to the print cartridge, do not use ammonia-based cleaners on or around the printer.

If toner gets on your clothes, wipe it off with a dry cloth and wash your clothes in cold water. Hot water sets toner into fabric.

Table 4-1. Cleaning the printer

Component	Cleaning Method
Outside covers	Use an HP Toner Cleaning Cloth (part number 5090-3379) or a water-dampened cloth. Do not use solvents or ammonia-based cleaners.
Inside general	With a dry lint-free cloth, wipe any dust, spilled toner, and paper particles from the paper path area, the registration roller, and the print cartridge cavity.
ETB attaching roller	Clean with lint-free cloth.
Paper pickup rollers	Clean with lint-free cloth. If dirt cannot be removed, dampen the cloth with water.
Color registration detection unit	Clean with lint-free cloth. If dirt cannot be removed, dampen the cloth with water.

Cleaning spilled toner

Defective print cartridges can develop leaks. Also, after a paper jam has occurred, some toner might remain on the rollers and guides inside the printer. The pages that print immediately after the jam can pick up this toner.

CAUTION When cleaning the printer, do not touch the ETB with the damp cloth or with your fingers.

Vacuum specifications

Do not vacuum the printer or any spilled toner using a conventional vacuum. Toner particles used in this product might be too fine for effective vacuuming and could result in damage to conventional vacuums.

Slowly sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or toner vacuum. If a toner vacuum is used, the motor must be rated as dust explosion-proof. Fine powder can form explosive dust-air mixtures. Dispose of waste toner in accordance with local requirements.

A vacuum specifically designed for cleaning toner can be used if it is capable of filtering fine particles (5 microns in diameter).

Periodic cleaning

To ensure the printer continues to function properly throughout its life, periodic cleaning is necessary. The two areas that need periodic cleaning are the following:

- Static discharge comb (discharging unit)
- Horizontal registration/transparency (OHT) sensor

Cleaning the static discharge comb

Clean the static discharge comb at the top of the printer with the brush that is stored inside the front cover. You should clean the static discharge comb whenever you change the black print cartridge, whenever you replace the ETB, or whenever print quality defects occur.

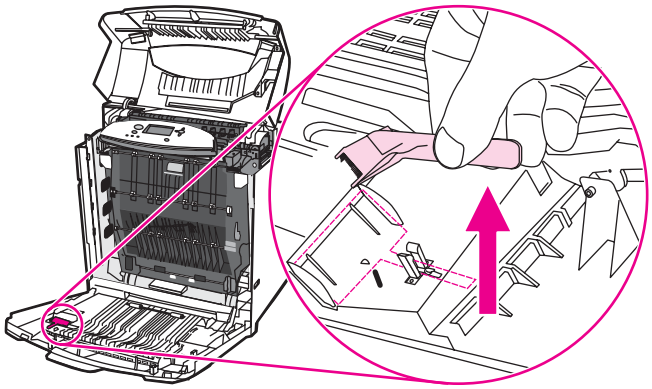
NOTE

If you are replacing the black print cartridge, clean the static discharge comb *first* and then replace the black print cartridge. (Toner might fall onto the black print cartridge during cleaning.) Be careful not to get toner on your clothes.

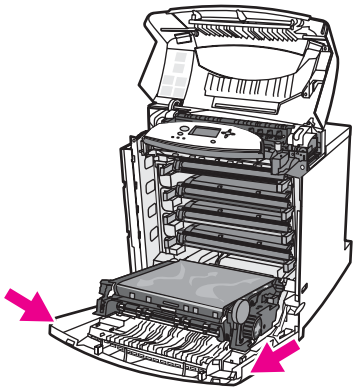
If you are replacing the ETB, clean the static discharge comb with the new cleaning brush included with the replacement ETB.

To clean the static discharge comb

1. Lift the top cover of the printer. Grasp the front cover and pull down. Remove the cleaning brush stored inside the front cover.

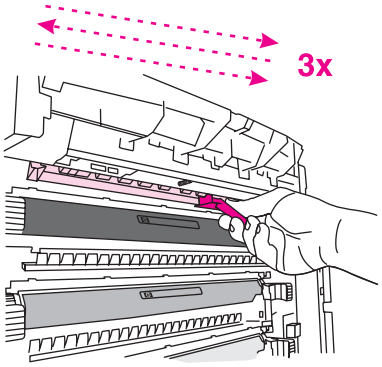


2. Grasp the green handles on the ETB and pull down.



3. Rub the cleaning brush back and forth four times over the static discharge comb at the top of the printer to remove excess toner. Shake the brush over a waste receptacle to dispose of the excess toner.

CAUTION If toner gets on your clothes, wipe it off with a dry cloth and wash your clothes in cold water. Hot water sets toner into fabric.



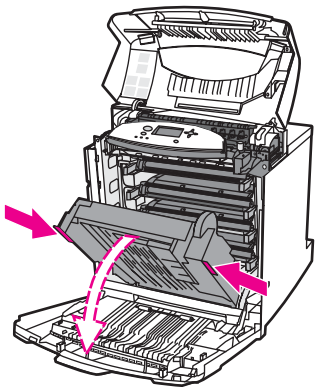
4. Close the ETB, and store the cleaning brush inside the front cover. If you are replacing the ETB, a new cleaning brush is included. Discard the old cleaning brush and store the new one inside the front cover.
5. Close the front cover and then the top cover.

Cleaning the OHT sensor

Clean the OHT sensor (horizontal registration/transparency sensor) when the printer control panel reports paper is being used instead of the desired transparency. Also clean the sensor when images on the front and back of the printed page do not align. A brush to clean the OHT sensor is stored at the base of the printer, underneath the cyan print cartridge.

To clean the OHT sensor

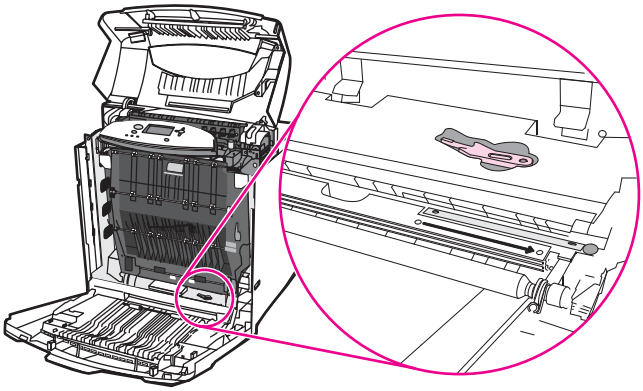
1. Lift the top cover of the printer. Grasp the front cover and pull down, and then grasp the green handles on the ETB and pull down.



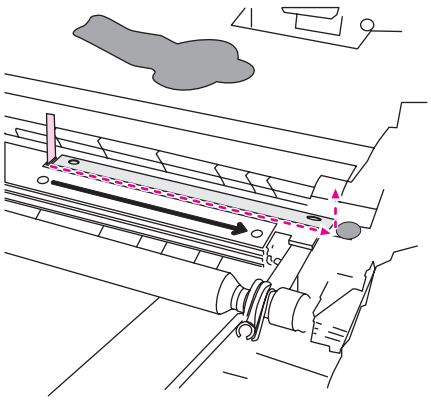
2. Remove the cyan print cartridge from the printer.

CAUTION Do not place the cyan print cartridge on the ETB while it is open. If the ETB is damaged, severe print quality problems might result.

3. Remove the OHT sensor cleaning brush from the base of the printer.



4. Insert the brush into the notch, and brush from left to right four or five times.



CAUTION Do not brush back and forth over the sensor. Doing so will smear dust over the sensor and cause print errors.

5. Replace the OHT sensor cleaning brush into the base of the printer.
6. Align the cyan print cartridge with the tracks inside the printer, and insert the cartridge until it is completely seated.
7. Close the front cover, then close the top cover.

Approximate replacement intervals for supply items

You can identify supply items by their labeling and their blue plastic handles. For instructions on installing supplies, see the installation guides supplied with each supply item.

The following table lists the approximate replacement intervals and part numbers for printer supply items and the control panel messages that prompt you when it is time to replace each item.

Table 4-2. Approximate replacement intervals for supply items

Supply item	Printer message	Expected life	Approximate time period[1]	Part number
Black (K) print cartridge	**REPLACE BLACK CARTRIDGE**	13,000 pages[2]	3.25 months	C9730-67901 (see Table 8-1. Supplies and accessories)
Cyan (C) print cartridge	**REPLACE CYAN CARTRIDGE**	12,000 pages[2]	3 months	C9731-67901 (see Table 8-1. Supplies and accessories)
Magenta (M) print cartridge	**REPLACE MAGENTA CARTRIDGE**	12,000 pages[2]	3 months	C9733-67901 (see Table 8-1. Supplies and accessories)
Yellow (Y) print cartridge	**REPLACE YELLOW CARTRIDGE**	12,000 pages[2]	3 months	C9732-67901 (see Table 8-1. Supplies and accessories)
Image Transfer kit (ETB)	**REPLACE TRANSFER KIT**	120,000 pages[3]	40 months	HP Color LaserJet 5500 models: RG5-7737-000CN HP Color LaserJet 5550 models: RG5-7137-000CN (see Table 8-1. Supplies and accessories)

Table 4-2. Approximate replacement intervals for supply items (continued)

Supply item	Printer message	Expected life	Approximate time period[1]	Part number
Image Fuser kit	**REPLACE FUSER KIT**	150,000 pages	50 months	HP Color LaserJet 5500 models: RG5-6700-000CN (110V) HP Color LaserJet 5550 models: RG5-7691-000CN (110V) HP Color LaserJet 5500 models: RG5-6701-000CN (220V) HP Color LaserJet 5550 models: RG5-7692-000CN (220V) (see Table 8-1. Supplies and accessories)
Pickup roller	none	300,000 pages[4]	75 months	Replace these three rollers together. RY7-5097-000CN
Feed roller	none	300,000 pages[4]	75 months	
Separation roller	none	300,000 pages[4]	75 months	

[1]Approximate lives are based on 4,000 pages per month.
[2]The approximate average A4/Letter-size page count is based on 5% coverage of individual colors. Page counts are only estimations; usage conditions and print patterns cause results to vary.
[3]Usage conditions and print patterns cause results to vary. See Figure 4-1. ETB total page count according to average job length for more information.
[4]Usage conditions and print patterns cause results to vary.

CAUTION Hewlett-Packard recommends the use of HP products in this printer. Use of non-HP products can cause problems that require service not covered by the Hewlett-Packard warranty or service agreements.

ETB life under different circumstances

Depending on the printer workload, the customer will need to replace the ETB once or twice in the life of the printer. In order to help plan supplies purchases, the HP Color LaserJet 5500series printer calculates an estimated remaining number of pages that can be printed on the ETB and displays this on the Supplies Status page under Transfer Kit: HP Part Number: RG5-7737-000CN. You can view the Supplies Status page by printing it from the printer's control panel. If the printer is connected to the network, you can also view the page in your Web browser, through the HP Web Jetadmin software or the HP Toolbox (HP Color LaserJet 5550 models only).

The number of pages an ETB can print is a function of two factors:

- The number of times the belt goes from a stationary to a rotating state (spins up)
- The number of pages printed on the belt

Unless print jobs are queued back to back, each print job will require the belt to spin up.

Think of the ETB as having a limited number of wear units. It has 200,000 wear units when it is new. Each time the belt spins up, it uses two wear units. Each time it prints a page, the belt uses one wear unit.

Since most print jobs are not queued, the average number of pages per job, or job length, is a factor in how fast the ETB will wear out. The shorter the average job, the faster the ETB will wear out.

Figure 4-1. ETB total page count according to average job length shows how many pages an ETB will print, given various average job lengths.

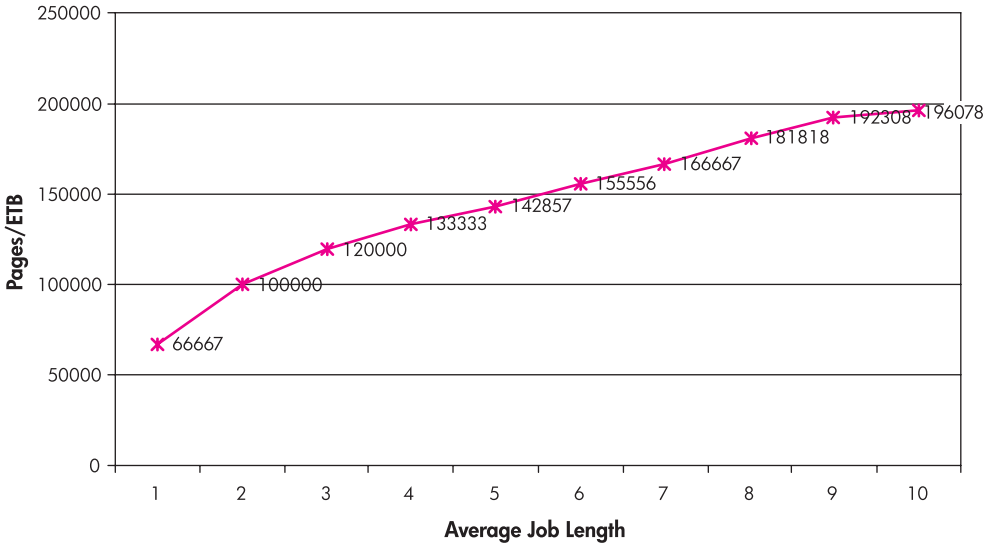


Figure 4-1. **ETB total page count according to average job length**

The printer assumes an average print job length of three pages to estimate how many pages are remaining on the ETB. For an average job length of three pages, the ETB will print 120,000 pages.

If all print jobs are exactly three pages long, for each page printed the number of estimated pages remaining would decrease by one, beginning with the maximum 120,000 pages. If the job's length is less than three pages, the estimated pages remaining number decreases more quickly than the rate at which the number of pages actually printed increases. If the job's length is greater than three pages, the number of pages remaining decreases less quickly than the rate at which the actual number of pages printed increases.

Locating supplies

Figure 4-2. Location of supplies illustrates the location of each supply item.

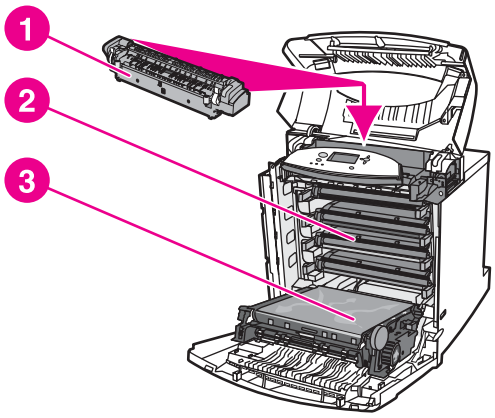


Figure 4-2. **Location of supplies**

1 Fuser
2 Print cartridges
3 Transfer unit (ETB)

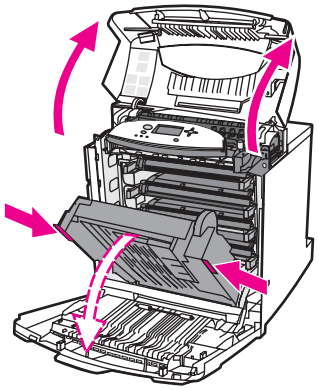
Replacing supply items

This section contains instructions for replacing supply items including print cartridges, the transfer unit (ETB), and the fuser.

Changing print cartridges

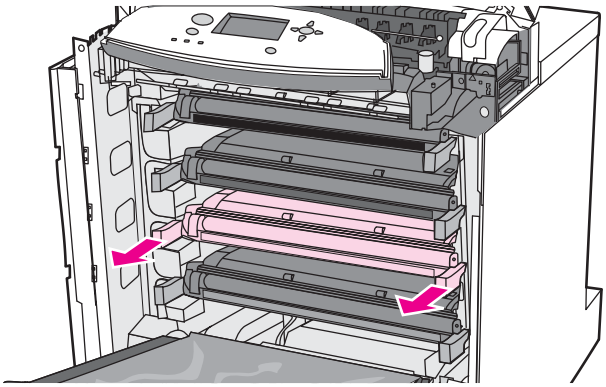
Replace a print cartridge when the printer control panel displays a **REPLACE <COLOR> CARTRIDGE** message. The control panel display will also indicate the color that should be replaced (unless a genuine HP cartridge is not currently installed).

1. Lift the top cover of the printer. Grasp the front cover and pull down, and then grasp the green handles on the ETB and pull down.



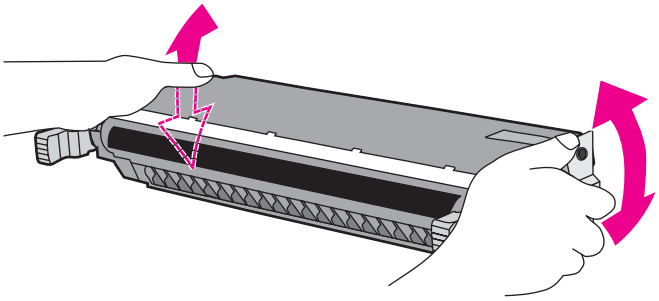
CAUTION Do not place anything on the ETB while it is open. If the ETB is punctured, print quality problems may result.

2. Remove the used print cartridge from the printer.

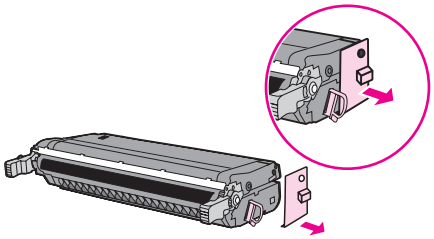


3. Remove the new print cartridge from the bag. Place the used print cartridge in the bag for recycling. See the enclosed recycling guide in the new toner cartridge box for replacing instructions.

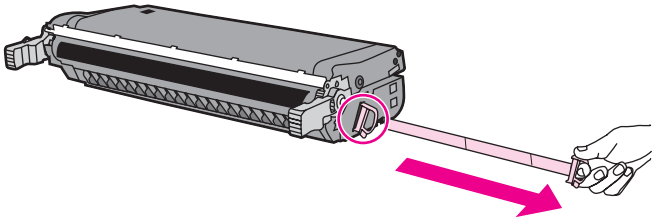
4. Grasp both sides of the cartridge and distribute the toner by gently rocking the cartridge from side to side.



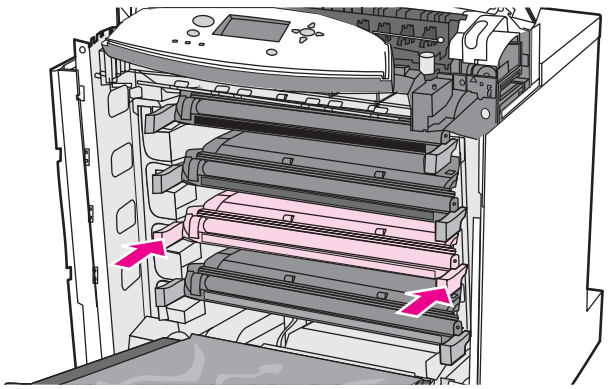
5. Remove the orange shipping tape. Remove and discard the orange shipping locks.



6. Remove the inside sealing tape by pulling the orange loop on the end and pulling the tape completely out. Discard the tape.



7. Grasp the blue handles on the sides of the print cartridge. Align the print cartridge with the tracks inside the printer and insert the cartridge until it is completely seated.



8. Close the ETB, the front cover, then the top cover. After a short while, the control panel should display **Ready**.

NOTE If a cartridge is in the wrong slot, the control panel displays the message **Incorrect supplies**.

9. Installation is complete. Place the used print cartridge in the box in which the new cartridge arrived. See the enclosed recycling guide for recycling instructions.

Replacing the transfer unit (ETB)

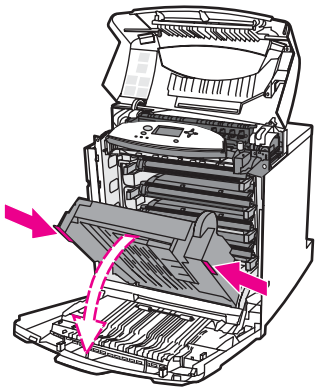
Replace the transfer unit (ETB) when the printer control panel displays: **REPLACE TRANSFER KIT**.

NOTE

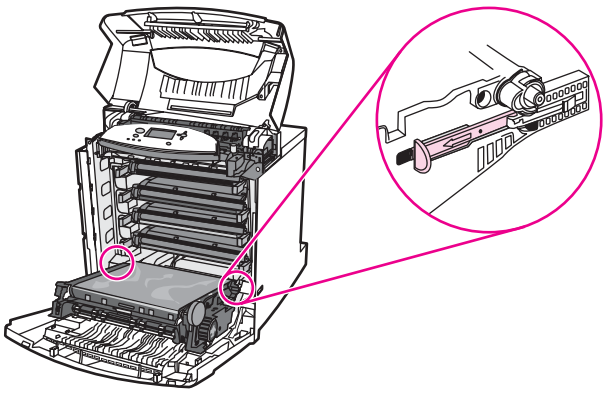
If you replace the transfer unit when it is not at the end of life, for instance if it is defective, you will need to calibrate the printer and reset the transfer unit count through the control panel. See Cleaning the static discharge comb for instructions.

Clean the static discharge comb whenever you replace the ETB. Use the new cleaning brush that is included with the replacement ETB. See Cleaning the static discharge comb.

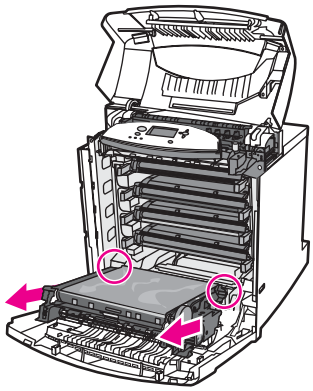
1. Turn the printer off.
2. Using the side handles, open the top cover. Open the front cover.
3. Grasp the green handles on the transfer unit and pull down.



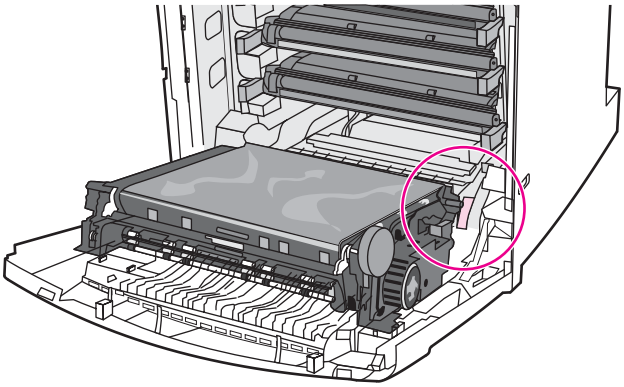
4. Locate the blue release latches on either side of the transfer unit (near the bottom of the transfer unit).



5. Grasp the transfer unit with two hands. Simultaneously pull the release latches on either side of the transfer unit and slide the unit out of the printer.



6. Remove the new transfer unit from the bag.
7. Hold the transfer unit on either side. Guide the feet into the cups and slide the transfer unit into the printer.



8. Close the transfer unit and front cover. Close the top cover and turn the printer on. After a short while, the control panel should display **NEW TRANSFER KIT**.
9. Press ▼ to highlight **YES**.
10. Press ✔ to select **YES**.
11. Press ▲ to reset the transfer unit count.
12. Wait for the printer to calibrate.

Replacing the transfer unit when it is not at end of life

If you replace the transfer unit when it is not at the end of life (for example, if it is defective) you will need to calibrate the printer and reset the transfer unit count through the control panel.

Use the following steps to calibrate the printer:

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.

5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **CALIBRATE NOW** (HP Color LaserJet 5500 models) or **FULL CALIBRATE NOW** (HP Color LaserJet 5550 models).
7. Press ✔ to select **CALIBRATE NOW** (HP Color LaserJet 5500 models) or **FULL CALIBRATE NOW** (HP Color LaserJet 5550 models).
8. Wait for the printer to calibrate.

Use the following steps to reset the transfer unit count:

1. Press ✔ HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **RESETS**.
5. Press ✔ to select **RESETS**.
6. Press ▼ to highlight **RESET SUPPLIES**.
7. Press ✔ to select **RESET SUPPLIES**.
8. Press ▼ to highlight **NEW TRANSFER KIT**.
9. Press ✔ to select **NEW TRANSFER KIT**.
10. Press ▼ to highlight **YES**.
11. Press ✔ to reset the transfer unit count.

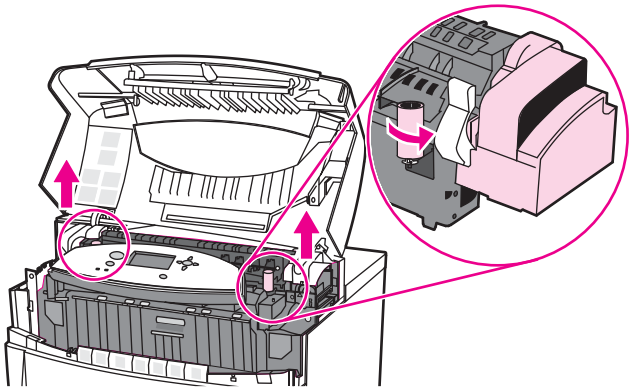
Replacing the fuser

Replace the fuser when the printer control panel displays **REPLACE FUSER KIT**.

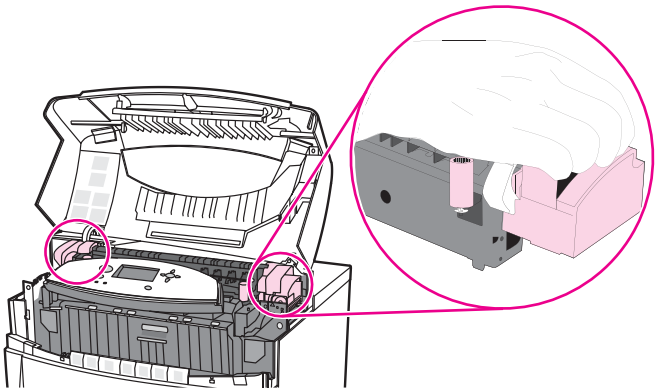
1. Turn the printer off.
2. Using the side handles, open the top cover.

WARNING! The fuser might be hot. Wait 10 minutes before proceeding.

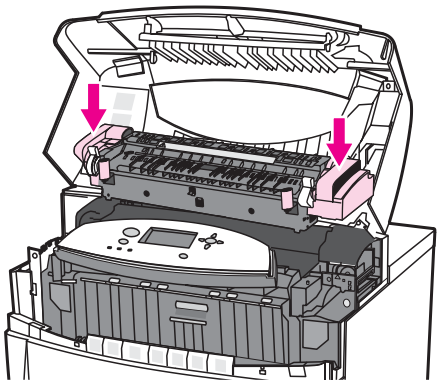
3. Completely loosen the blue thumb screws on either side of the fuser.



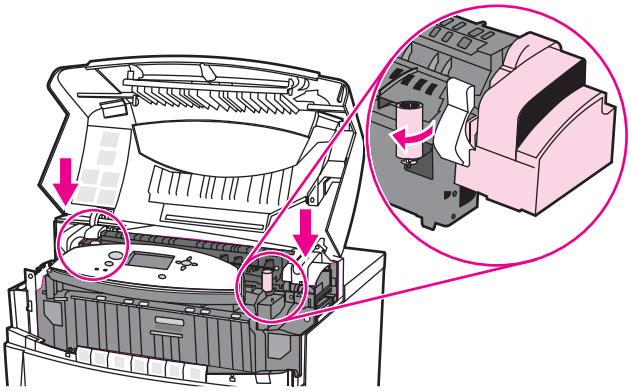
4. Grasp the ends and pull straight up to remove the fuser.



5. Remove the new fuser from the bag.
6. Grasp the sides of the fuser and lower it into the printer. Press firmly to seat it in position.



7. Tighten the blue thumb screws.



8. Close the top cover, and turn the printer on. After a short while, the control panel should display **NEW FUSER KIT**.
9. Press ▼ to highlight **YES**.
10. Press ✔ to select **YES**.
11. Press ▲ to reset the fuser count.

Replacing the fuser when it is not at end of life

If you replace the fuser when it is not at the end of its life (for example, if it is defective) you will need to reset the fuser count through the control panel.

Use the following steps to reset the fuser count:

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 printer) to open the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **RESETS**.
5. Press ✔ to select **RESETS**.
6. Press ▼ to highlight **RESET SUPPLIES**.
7. Press ✔ to select **RESET SUPPLIES**.
8. Press ▼ to highlight **NEW FUSER KIT**.
9. Press ✔ to select **NEW FUSER KIT**.
10. Press ▼ to highlight **YES**.
11. Press ✔ to reset the fuser count.

Printer memory (HP Color LaserJet 5500 models)

The printer has five dual in-line memory module (DIMM) slots.

NOTE For maximum flexibility in DIMM support, the formatter is designed with four 168-pin DIMM slots and a fifth 100-pin DIMM slot. Due to technical limitations, only four DIMMs can be loaded at a time, so the fifth DIMM slot (100-pin) is logically the same as the fourth DIMM slot (168-pin). The system can only have a DIMM installed on the fourth DIMM slot (168-pin) provided that no DIMM is installed in the fifth DIMM slot (100-pin) and vice versa.

Use these DIMM slots to upgrade the printer with:

- More printer memory - DIMMs are available in 64, 128, and 256 MB
- Flash memory DIMMs - available in 4 MB; unlike standard printer memory, flash DIMMs can be used to permanently store downloaded items in the printer, even when the printer is off
- DIMM-based accessory fonts, macros, and patterns
- Other DIMM-based printer languages and printer options

You may want to add more memory to the printer if you often print complex graphics or PostScript documents, or if you use many downloaded fonts. Additional memory also allows the printer to print multiple, collated copies at the maximum speed.

NOTE Single in-line memory modules (SIMMs) used on previous HP LaserJet printers are not compatible with the printer.

Before ordering additional memory, print a configuration page to see how much memory is currently installed.

To print a configuration page

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. Press ✔ to select **PRINT CONFIGURATION**.

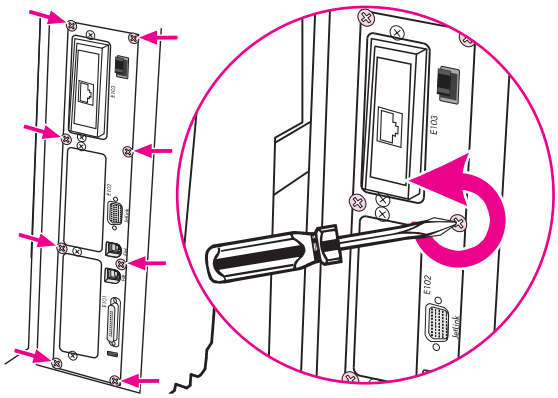
Installing memory and font DIMMs (for HP Color LaserJet 5500 models)

You can install more memory for the printer, and you can also install a font DIMM to allow the printer to print characters for languages such as Chinese or the Cyrillic alphabet.

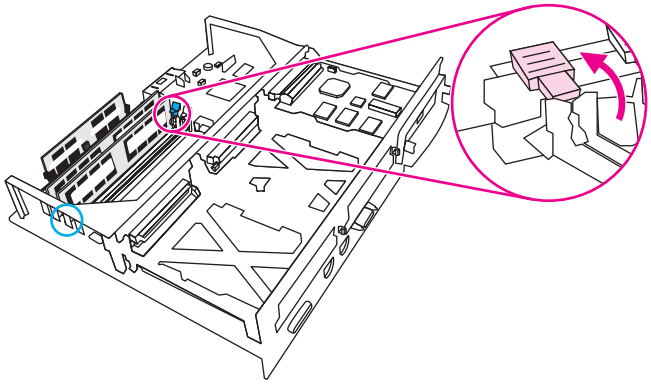
CAUTION Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap, or frequently touch the surface of the DIMM antistatic package and then touch bare metal on the printer.

1. Turn the printer off, and disconnect all power and interface cables. Locate the formatter board in the rear of the printer.

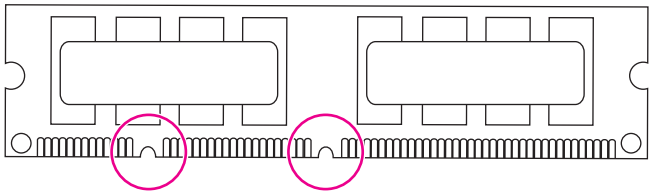
2. Remove the eight screws holding the board in place, and set them aside.



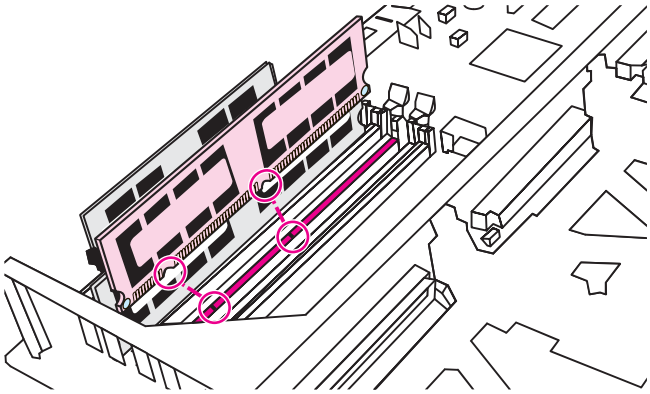
3. Slide out the formatter board and set it on a clean, flat, grounded surface.
4. Release the locks on each side of the DIMM slot.



5. Remove the DIMM from the antistatic package. Locate the alignment notches on the bottom edge of the DIMM.

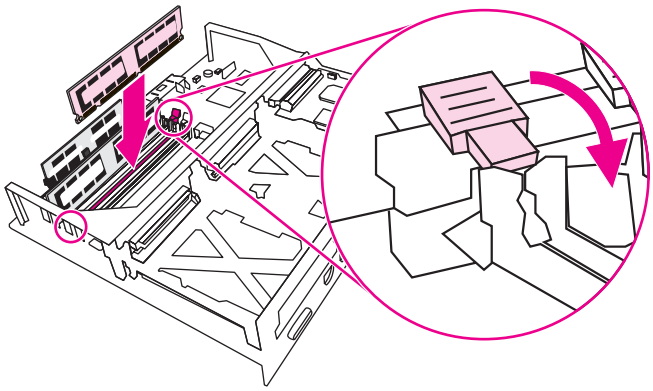


6. Holding the DIMM by the edges, align the notches on the DIMM with the bars in the DIMM slot.



NOTE If you have difficulty inserting the DIMM or closing the latches, make sure the notches on the bottom of the DIMM are aligned with the bars in the slot. If the DIMM still does not go in, make sure you are using the correct type of DIMM.

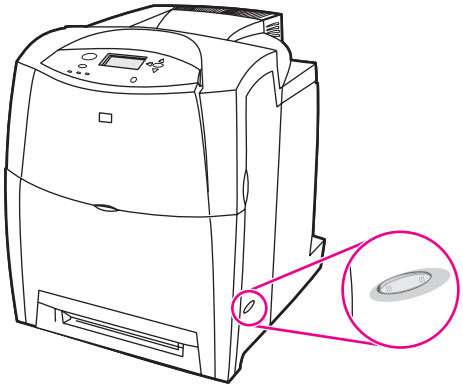
7. Firmly press the DIMM straight into the slot. Close the locks on each side of the DIMM until they snap into place.



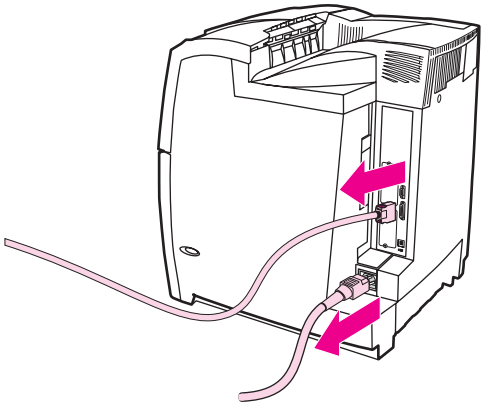
8. Align the formatter board in the tracks at the top and bottom of the slot, and slide the board back into the printer. Replace and tighten the eight screws removed in step 2.
9. Reconnect the power cable and interface cables, and turn the printer on.

Installing DDR memory DIMMs (for HP Color LaserJet 5550 models)

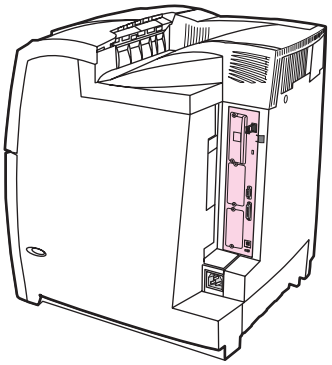
1. Turn the printer off.



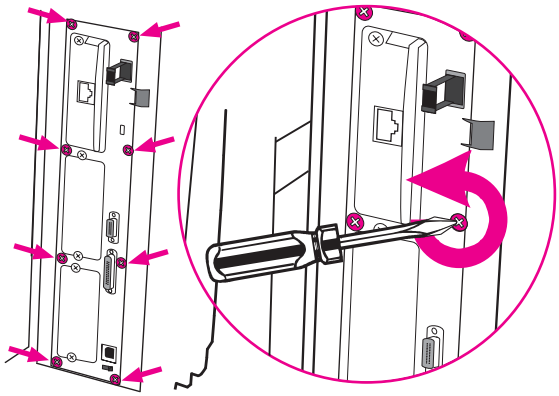
2. Disconnect all power and interface cables.



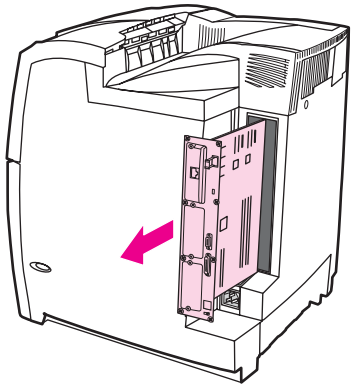
3. Locate the formatter board in the rear of the printer.



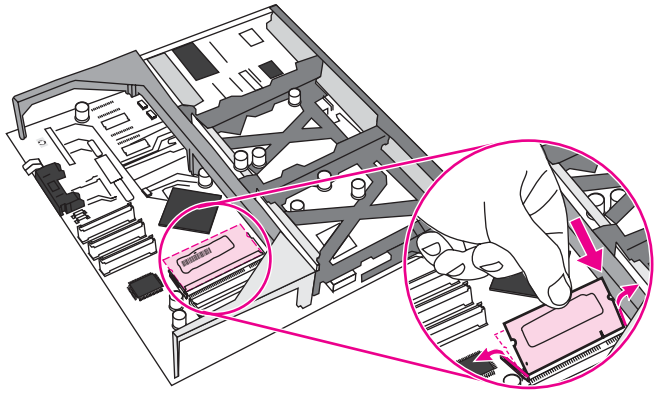
4. Using a #2 Phillips screwdriver, remove the eight screws holding the board in place, and set them aside.



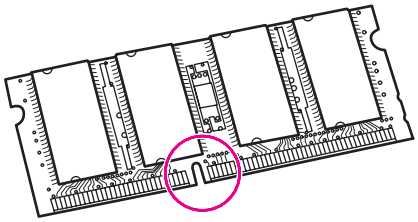
5. Slide out the formatter board and set it on a clean, flat, grounded surface.



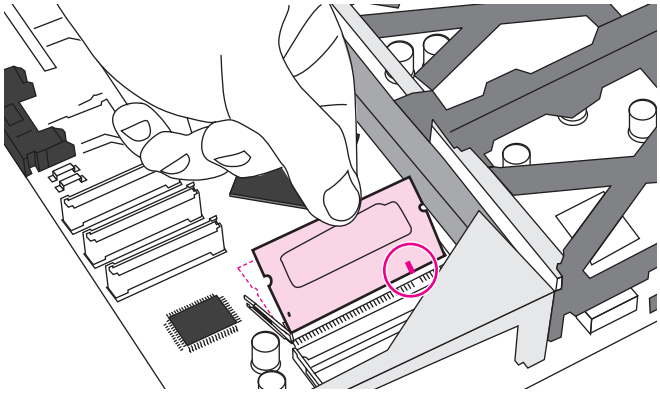
6. To replace a DDR DIMM that is currently installed, spread the latches apart on each side of the DIMM slot, lift the DDR DIMM up at an angle, and pull it out.



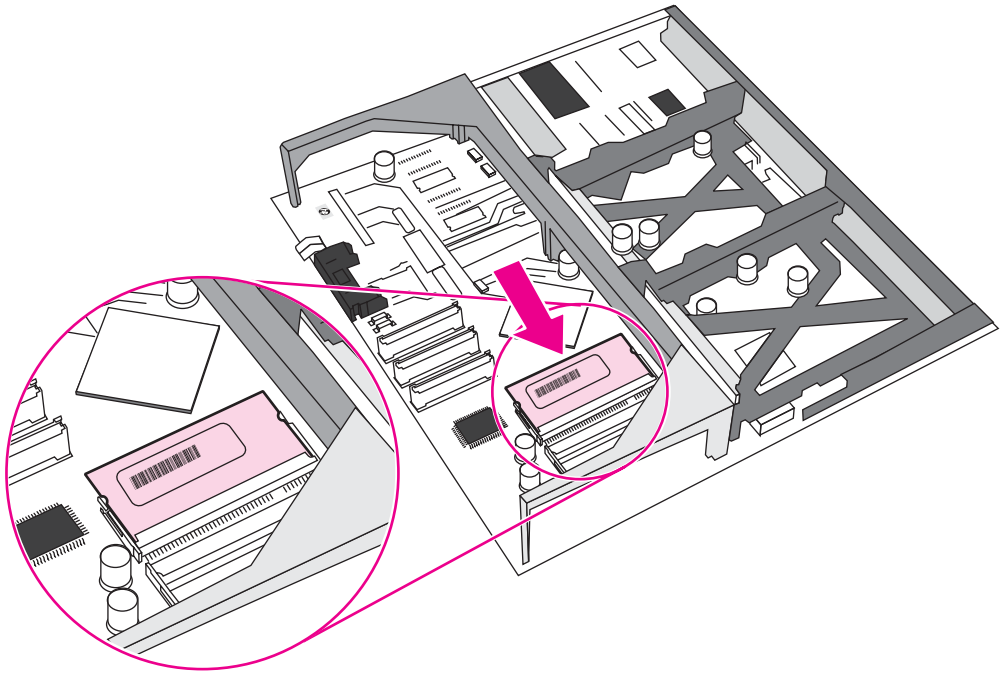
7. Remove the new DIMM from the antistatic package. Locate the alignment notch on the bottom edge of the DIMM.



8. Holding the DIMM by the edges, align the notch on the DIMM with the bar in the DIMM slot at an angle and firmly press the DIMM into the slot until it is fully seated. When installed correctly, the metal contacts are not visible.

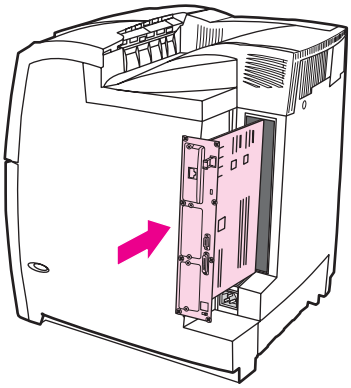


9. Push down on the DIMM until both latches engage the DIMM.

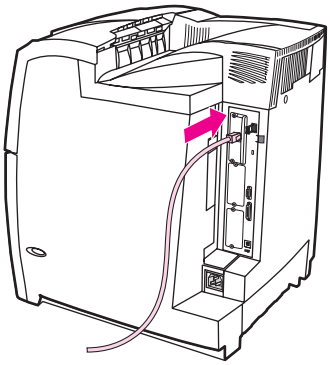


NOTE If you have difficulty inserting the DIMM, make sure the notch on the bottom of the DIMM is aligned with the bar in the slot. If the DIMM still does not go in, make sure you are using the correct type of DIMM.

10. Align the formatter board in the tracks at the top and bottom of the slot, and then slide the board back into the printer. Replace and tighten the eight screws removed in step 4.



11. Reconnect the power cable and interface cables, and turn the printer on.



12. If you installed a memory DIMM, go to Enabling memory (HP Color LaserJet 5500 models).

Enabling memory (HP Color LaserJet 5500 models)

If you installed a memory DIMM, set the printer driver to recognize the newly added memory.

1. On the **Start** menu, point to **Settings**, and then click **Printers** or **Printers and Faxes**.
2. Select this printer and select **Properties**.
3. On the **Configure** tab, click **More**.
4. In the **Total Memory** field, type or select the total amount of memory that is now installed.
5. Click **OK**.

Enabling the language font DIMM (HP Color LaserJet 5550 models)

If you installed a language font DIMM in the printer, you must select the Font DIMM option in the printer driver in order for the font DIMM to work correctly. To enable fonts from the PCL 5c and PCL 6 printer drivers for Windows, follow this procedure:

1. On the **Start** menu, point to **Settings**, and then click **Printers**.
2. Select this printer and select **Properties**.
3. On the **Configure** tab, click **More**.

4. Select the **Font DIMM** check box.
5. In the **Configure Font DIMMs** dialog box, click **Add** to add the font file.
6. In the **Add Font DIMM** dialog box, browse to the location of the font file, select the font file, and then click **OK**.
7. In the **Configure Font DIMMs** dialog box, select the installed DIMM.
8. Click **OK**.

Enabling the language font DIMM (HP Color LaserJet 5500 models)

If you installed a language font DIMM in the printer, you must select the Font DIMM option in the printer driver for the font DIMM to work properly. To enable fonts from the PCL 5c and PCL 6 printer drivers for Windows, follow this procedure:

1. On the **Start** menu, point to **Settings**, and click **Printers**.
2. Select this printer and select **Properties**.
3. On the **Configure** tab, click **More**.
4. Select the **Font DIMM** check box.
5. In the **Configure Font DIMMs** dialog box, click **Add** to add the font file.
6. In the **Add Font DIMM** dialog box, browse to the location of the font file, select the font file, and click **OK**.
7. In the **Configure Font DIMMs** dialog box, select the installed DIMM.
8. Click **OK**.

Checking DIMM installation (HP Color LaserJet 5500 models)

Check that the DIMMs are installed correctly and working.

1. Turn the printer on. Check that the Ready light is on after the printer has gone through the startup sequence. If an error message appears, a DIMM may have been incorrectly installed.
2. Print a configuration page.
3. Check the Installed Personalities and Options section on the configuration page and compare it with the configuration page printed before the DIMM installation.
4. If the amount of recognized memory has not increased:

   The DIMM may not be installed correctly. Repeat the installation procedure.

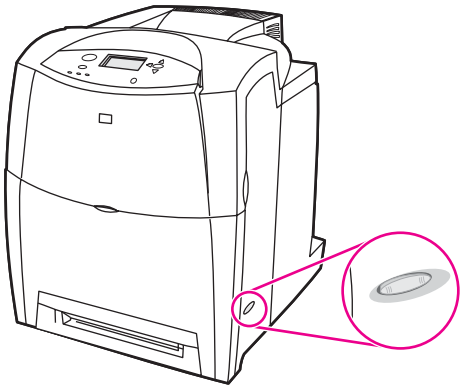
   The DIMM may be defective. Try a new DIMM.

Installing an HP Jetdirect print server card

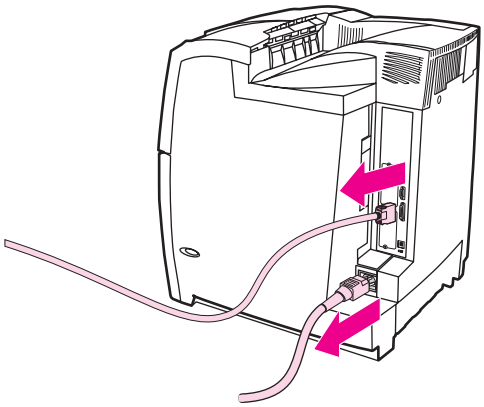
You can install an HP Jetdirect print server card in the base model printer, which comes with three available EIO slot.

To install an HP Jetdirect print server card

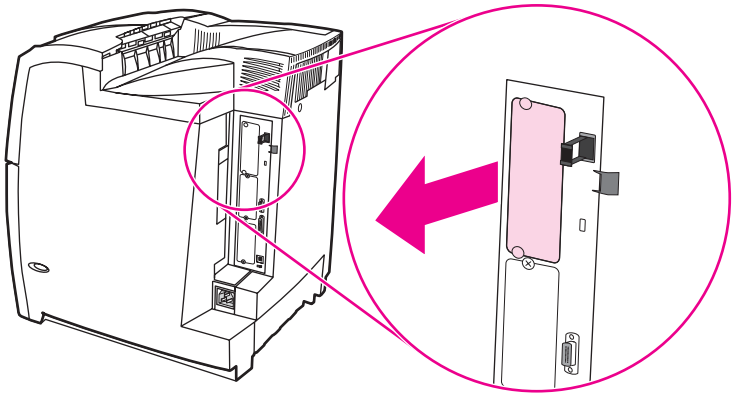
1. Turn the printer off.



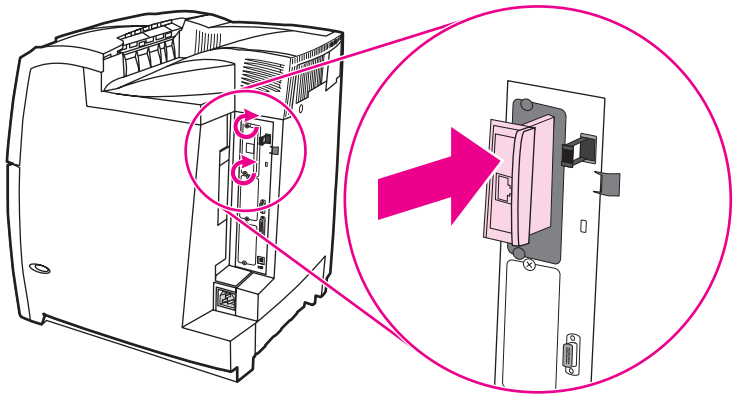
2. Disconnect all power and interface cables.



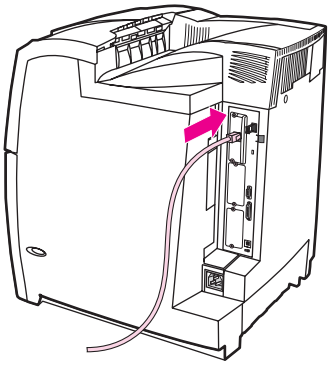
3. Locate an empty EIO slot. Loosen and remove the two retaining screws holding the cover for the EIO slot onto the printer, and then remove the cover. You will not need these screws and cover again.



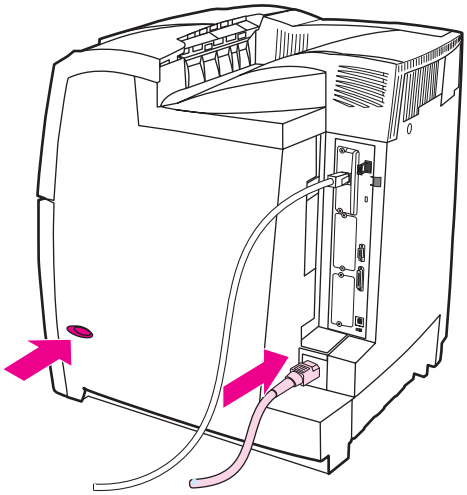
4. Firmly insert the HP Jetdirectprint server card into the EIO slot. Insert and tighten the retaining screws that came with the print server card.



5. Connect the network cable.



6. Reconnect the power cable, and turn the printer on.



7. Print a configuration page (see To print a configuration page). In addition to a printer configuration page and a Supplies Status page, an HP Jetdirect configuration page that contains network configuration and status information should also print.

   If it does not print, uninstall and reinstall the print server card to ensure that it is completely seated in the slot or try one of the other available slots.

8. Perform one of these steps:

   - Choose the correct port. See the computer or operating system documentation for instructions.
   - Reinstall the software, choosing the network installation this time.

5 Theory of operation

This chapter describes how to use the engine control system, laser/scanner system, image information system, and pickup/feed system for the HP Color LaserJet 5500 series printer.

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Basic operation

The HP Color LaserJet 5500 series printer's functions are divided into four systems:

- engine control system
- laser/scanner system
- image formation system
- pickup/feed system

This chapter describes each of these systems thoroughly.

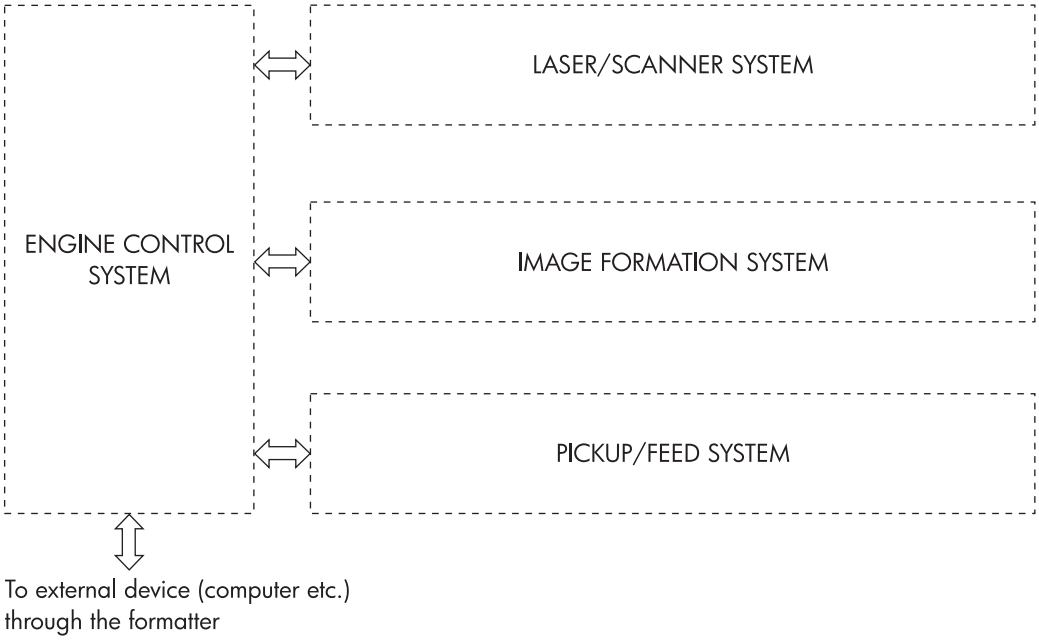

Figure 5-1. **Basic system operation**

Operation sequence

A microcomputer in the engine control system controls the operation sequence for the printer. Table 5-1. Basic operation sequence describes the main operational periods from the point when the printer is turned on until a print operation is completed and each motor stops rotating.

NOTE In the table below, "ETB" stands for "electrostatic transfer/transport belt." This component is described later in this chapter, as are the other components mentioned in the table.

Table 5-1. Basic operation sequence

Period	Purpose		Remark
WAIT (wait period)	From the time the power switch is turned on until the ETB cleaning is completed.	To clear a potential on the drum surface and to clean the ETB.	During this period, the printer checks the toner level and detects whether the cartridges are present. The printer also executes the pulse width modulation adjustment, color registration adjustment, and image density calibration control as required.
STBY (standby period)	From the end of the WAIT or LSTR period or last rotation until the formatter inputs a print command or until the power is turned off.	To keep the printer ready to print.	When the formatter sends a sleep command, the printer enters PowerSave mode.
INTR (initial rotations period)	From immediately after the formatter inputs a print command until the / TOP signal is sent to the formatter.	To stabilize the photosensitive drum's sensitivity in preparation for a print operation.	
PRINT (print period)	From the end of the INTR period until the leading edge detection sensor detects paper and then turns off the transfer positive bias.	To form an image on the photosensitive drum according to the video signal input from the formatter and to transfer the toner image to the paper.	After the power is turned on, the cartridge is cleaned every 35 pages and the ETB is cleaned every 100 pages.
LSTR (last rotations period)	From the end of the PRINT period until the ETB motor stops.	To deliver the paper out of the printer and to clean the ETB.	The last rotations period lasts until the instant the formatter sends a print command. Then the initial rotations period starts again.

Engine control system

The engine control system is the brain of the printer. It controls all the other systems according to commands from the formatter. The engine control system consists of the following:

- DC controller PCB
- fuser power supply PCB
- high-voltage PCB
- low-voltage power supply unit
- formatter

Each of these components is described in the following sections.

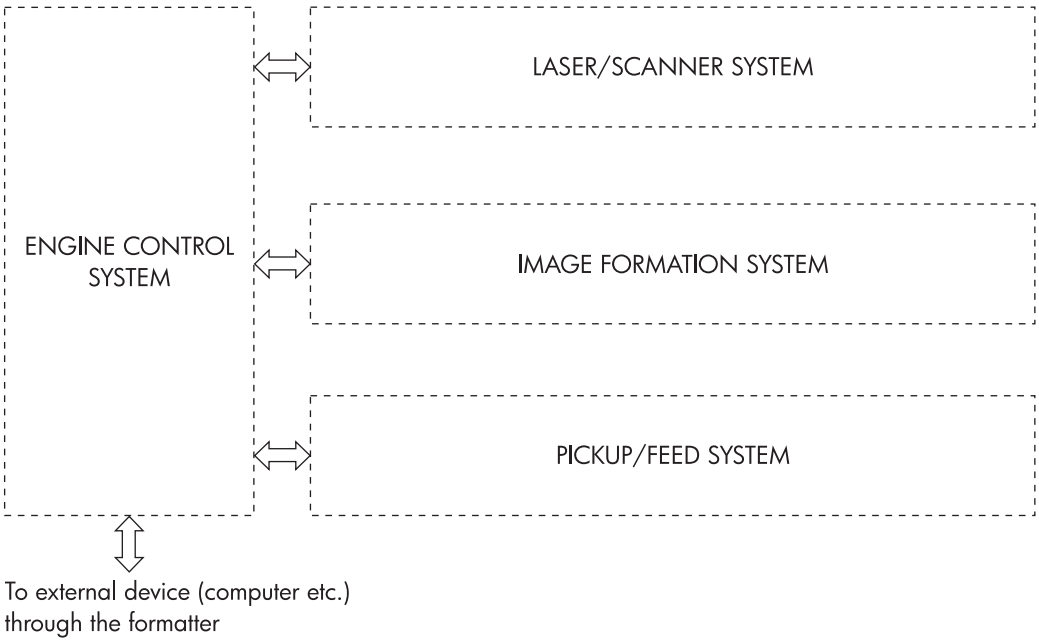

Figure 5-2. **Engine control system**

NOTE In this manual, the abbreviation "PCB" stands for "printed circuit board assembly." Components described as a PCB may consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

DC controller circuit

The DC controller is responsible for controlling the print operation sequence for the printer. The sequence of events is as follows:

1. Power is turned on.
2. The low-voltage power supply unit supplies DC power to the DC controller.
3. The CPU in the DC controller starts to control printer operations.
4. The printer enters the standby state.
5. Based on the print command and the image data input from the formatter, the CPU sends a signal to drive the laser diode, the motors, the clutch, and the solenoids.

NOTE See the general circuit diagram in chapter 8 for detailed information on the printer circuitry.

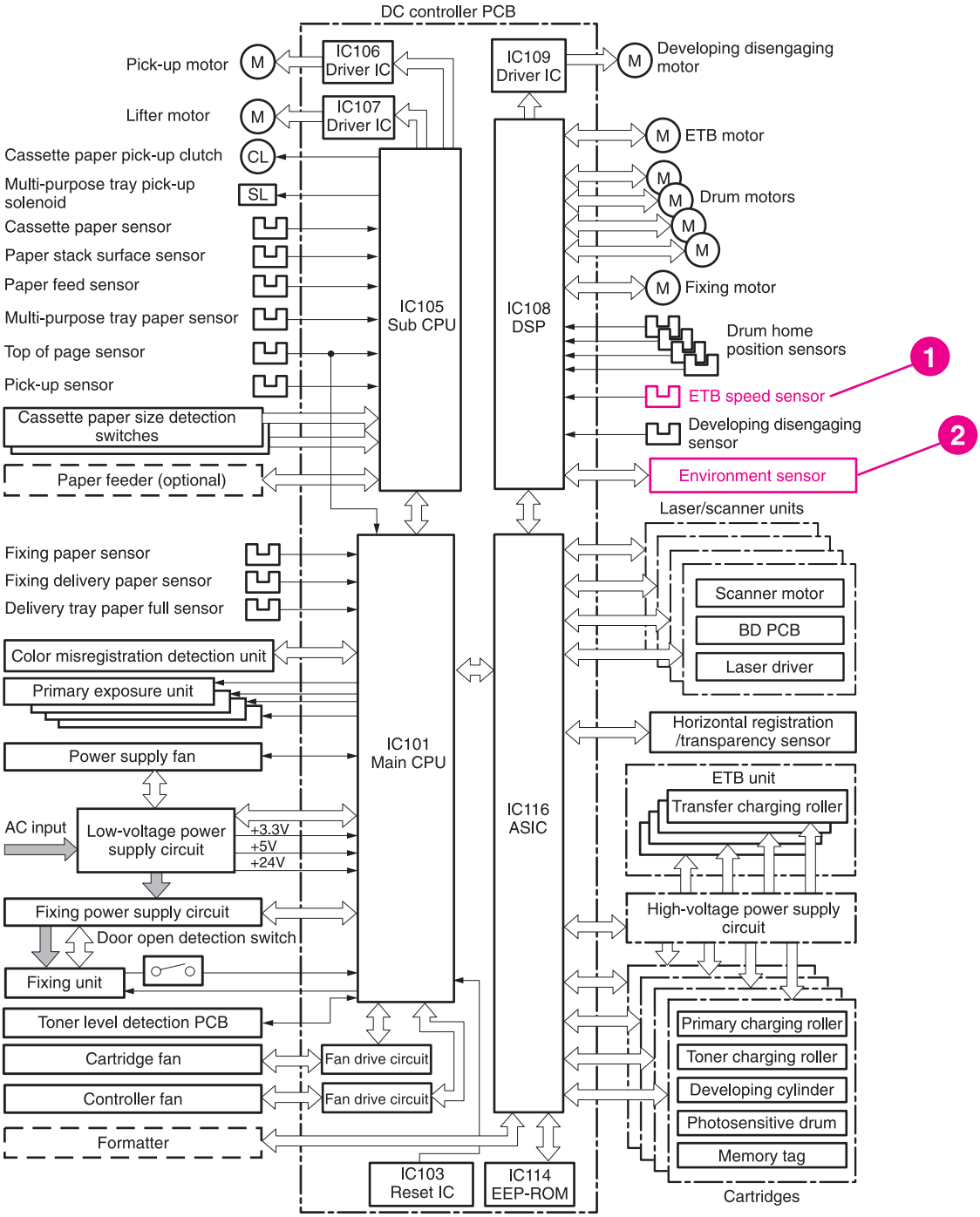

Figure 5-3. **DC controller circuit**

1 HP Color LaserJet 5500 models only
2 HP Color LaserJet 5550 models only

Motors and fans

The printer has twelve motors, including three fans. Nine of the motors are DC motors; the other three are stepping motors. Figure 5-4. Motors and fans shows the locations of the motors and fans. Table 5-2. Function of motors and fans explains the function of each component.

Six of the nine DC motors and two of the stepping motors are used for paper feeding and image formation. The remaining three DC motors are fan motors. The remaining stepping motor is the developing disengaging motor.

Since the printer transfers an image in four colors in line onto the paper, small changes in the rotational speed of the motor are likely to cause color misalignment. The DC motors used for image formation are precisely controlled to account for rotational speed fluctuation.

For the HP Color LaserJet 5550 models only:

Drum Motor Control

The main CPU determines a failure, stops the printer engine, and notifies the video controller under the following conditions:

- Drum startup abnormality. When the printer does not enter MOTOR READY state within 6.6 seconds from the start of the drum motor drive.
- Drum motor rotation abnormality. When the printer enters MOTOR NOT READY state for 6.6 seconds continuously after it has entered the MOTOR READY state.

Fixing motor control

The main CPU determines a failure, stops the printer engine, and notifies the video controller under the following conditions:

- Fixing motor startup abnormality. When the printer does not enter MOTOR READY state within 6.6 seconds from the start of the drum motor drive.
- Fixing motor rotation abnormality. When the printer enters MOTOR NOT READY state for 6.6 seconds continuously after it has entered the MOTOR READY state.

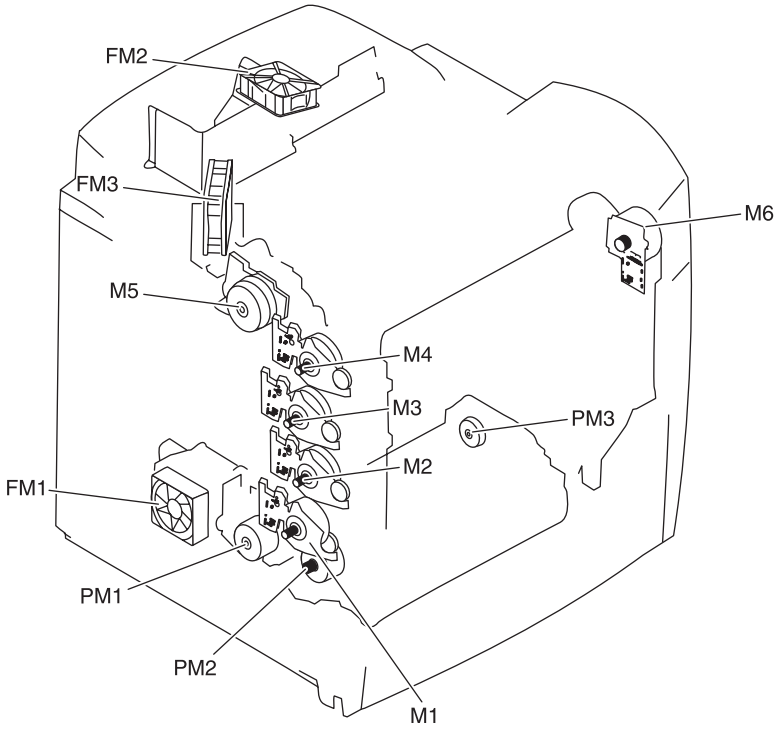

Figure 5-4. **Motors and fans**

Table 5-2. Function of motors and fans

Name	Function	Type	Speed switching
M1 Cyan drum motor	Drives the photosensitive drum and stirrer	DC motor	4-speed (full, 1/2, 1/3, 1/4)
M2 Yellow drum motor			
M3 Magenta drum motor			
M4 Black drum motor			
M5 Fuser motor	Drives the pressure roller and delivery roller	DC motor	4-speed (full, 1/2, 1/3, 1/4)
M6 ETB motor	Drives the ETB	DC motor	4-speed (full, 1/2, 1/3, 1/4)
PM1 Developing disengaging motor	Separates the photosensitive drums and the developing cylinders	Stepping motor	No

Table 5-2. Function of motors and fans (continued)

Name	Function	Type	Speed switching
PM2 Pick up motor	Drives the pickup roller and feed roller	Stepping motor	4-speed (full, 1/2, 1/3, 1/4)
PM3 Lifter motor	Lowers the pickup roller and raises the lifter	Stepping motor	No
FM1 Power supply fan	Exhausts heat around the DC controller and the low-voltage power supply	DC motor	2-speed (full, half)
FM2 Formatter fan	Exhausts heat around the formatter	DC motor	2-speed (full, half)
FM3 Cartridge fan	Exhausts heat around the fuser and cartridges	DC motor	2-speed (full, half)

Fuser power supply circuit

This printer uses an induction heating method to heat the fuser. Figure 5-5. Fuser power supply circuit shows the configuration of the fuser power supply.

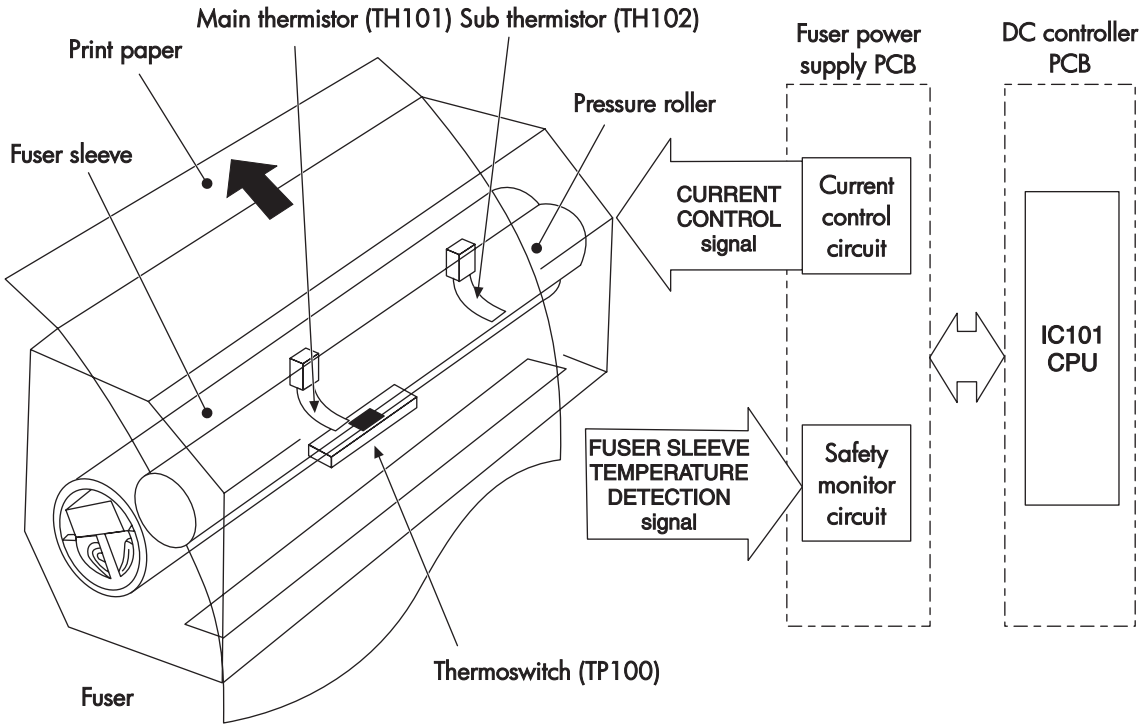

Figure 5-5. Fuser power supply circuit

The fuser power supply has three main components:

- **Fuser sleeve.** A high-frequency current flows through an induction heating coil in the fuser sleeve, causing the metal sleeve to heat.
- **Thermistors.** Two thermistors are in the fuser sleeve: one in the center, and the other at the end. Each thermistor monitors the temperature in the fuser sleeve.
- **Thermoswitch.** The thermoswitch is located at the bottom center of the fuser sleeve. When the fuser is overheating, the switch opens, and power to the induction heating coil is shut off.

Heater temperature control

The heater temperature control detects the surface temperature of the fuser sleeve and controls the current flowing to the induction heating coil. The heater temperature control circuit is shown in Figure 5-6. Heater temperature control circuit.

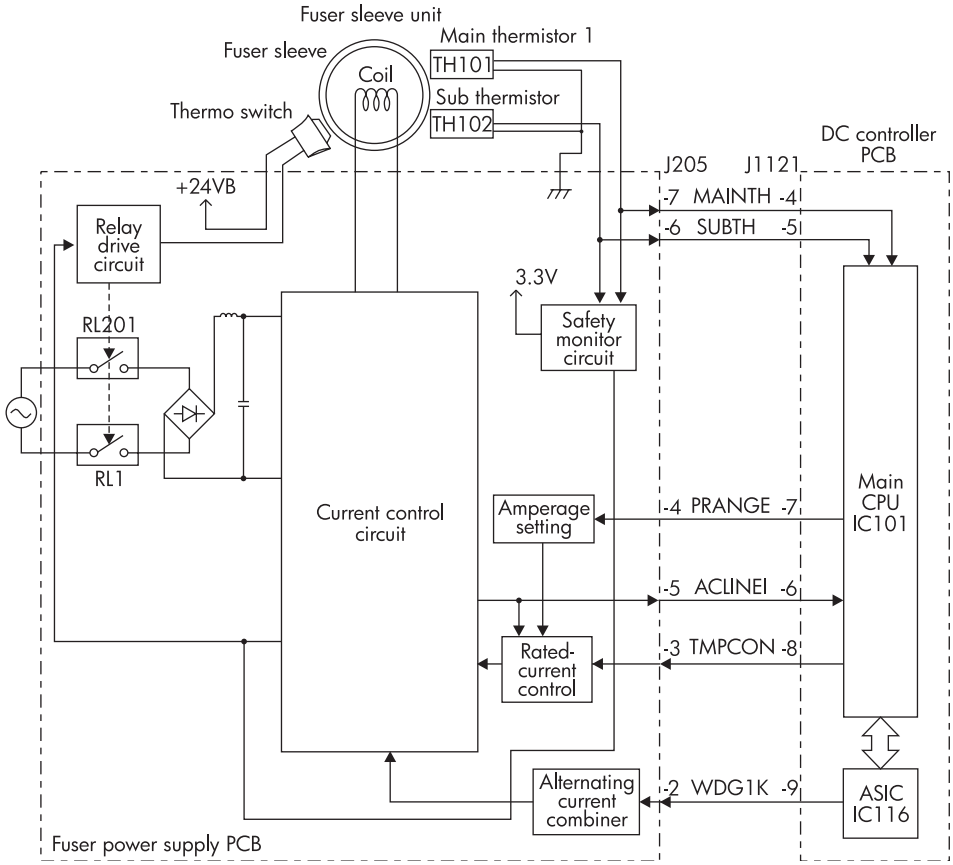

Figure 5-6. **Heater temperature control circuit**

The two thermistors that are attached to the fuser sleeve (TH101 and TH102) detect the surface temperature of the fuser sleeve. The main thermistor (TH101) controls the fuser temperature, and the sub thermistor (TH102) detects overheating at the end of the fuser sleeve. When the surface temperature of the fuser sleeve increases, resistance of the two thermistors is reduced, and the voltage of the main thermistor detection signal (MAINTH) and the sub thermistor detection signal (SUBTH) drops.

The main CPU (IC101) on the DC controller monitors the voltage of the MAINTH and SUBTH signals. The CPU sends the fuser temperature control signal (TMPCON) according to the voltage level.

The CPU sends the amperage control signal (PRANGE) to control the amperage of the fuser sleeve.

Heater temperature control (HP Color LaserJet 5550 models)

The fixing target temperature for the printer is as follows:

During STBY: 170°C (338°F) when power is ON. This shifts to 155°C (311°F) later on.
During printing: Varies according to the print mode commanded by the formatter.

Failure detection (HP Color LaserJet 5550 models)

The main CPU determines an abnormally high temperature when the main thermistor detects the following conditions:

- After the printer is turned on, if the temperature detected by the main thermistor remains higher than (220°C) (428°F) (equivalent to approximately 1.05 V) for longer than 500 ms.
- During the temperature adjustment of the fixing unit, if the output of the fixing temperature control (TMPCON) signal remains at0 for longer than 390 seconds.

High-voltage power supply

The high-voltage power supply circuit applies bias to the primary charging rollers, the toner charging rollers, the developing cylinders, the attaching roller, the transfer charging rollers, and the discharging unit. The main CPU in the DC controller controls the high-voltage power supply circuit and the discharging high-voltage circuit through the ASIC to generate these biases. Figure 5-7. High-voltage power supply circuit shows the high-voltage power supply circuit.

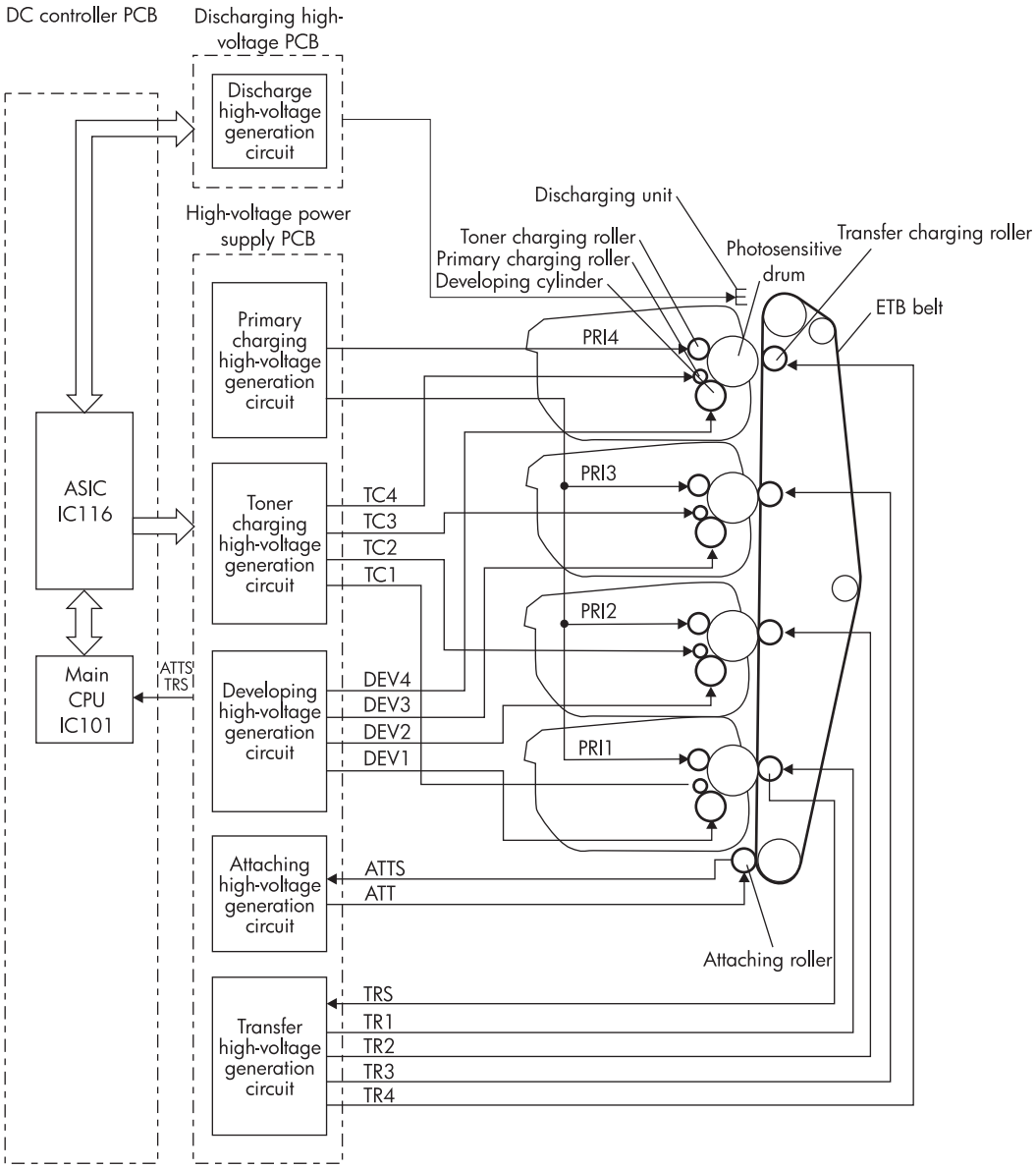

Figure 5-7. **High-voltage power supply circuit**

Low-voltage power supply

The low-voltage power supply circuit converts the AC voltage that is input from the electrical outlet to DC power and delivers it to each load in the printer. Figure 5-8. Low-voltage power supply circuit shows the low-voltage power supply circuit including the amount of voltage supplied to each component.

The AC power is supplied to the low-voltage power supply by turning on the power supply switch (SW301). The AC power is converted to the DC power that the printer requires:

- +24 V goes to the motors, solenoids, clutches, and the high-voltage power supply circuit.
- +5 V goes to the laser driver PCB, the beam detect PCB, and the formatter.
- +3.3 V goes to the formatter, the sensors, and the ICs in the DC controller PCB.

+24 V is divided into +24 VA, which is constantly sent from the low-voltage power supply circuit, and +24 VB, which stops power supply when the top cover or the front cover is opened. +24 VB goes to the fuser power supply circuit, high-voltage power supply circuit, the clutch, and the motors and solenoid. +24 VB also functions as the door open detection signal (/DOPEN). The CPU detects the door open with the signal.

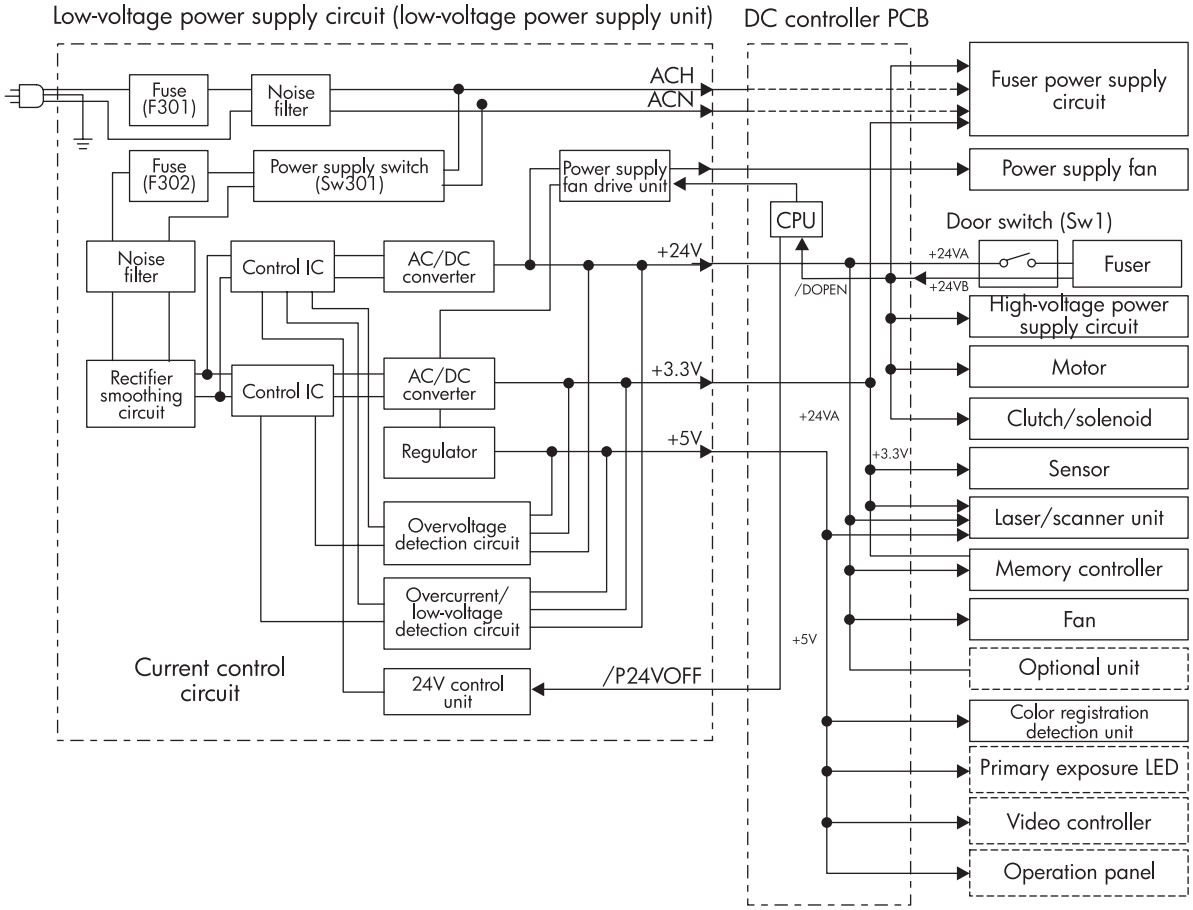

Figure 5-8. **Low-voltage power supply circuit**

Formatter system

The formatter PCB is responsible for the following:

- receiving and processing print data from the various printer interfaces
- monitoring control panel inputs and relaying printer status information (through the control panel and the bidirectional I/O)
- developing and coordinating data placement and timing with the print engine
- storing font information
- communicating with the host computer through the bidirectional interface
- controlling the PowerSave mode

The formatter monitors the printer continuously through the video interface. When the printer is ready to print, the formatter sends a signal to the DC controller, which turns the laser on or off based on the signal. Figure 5-9. Formatter system shows the formatter system.

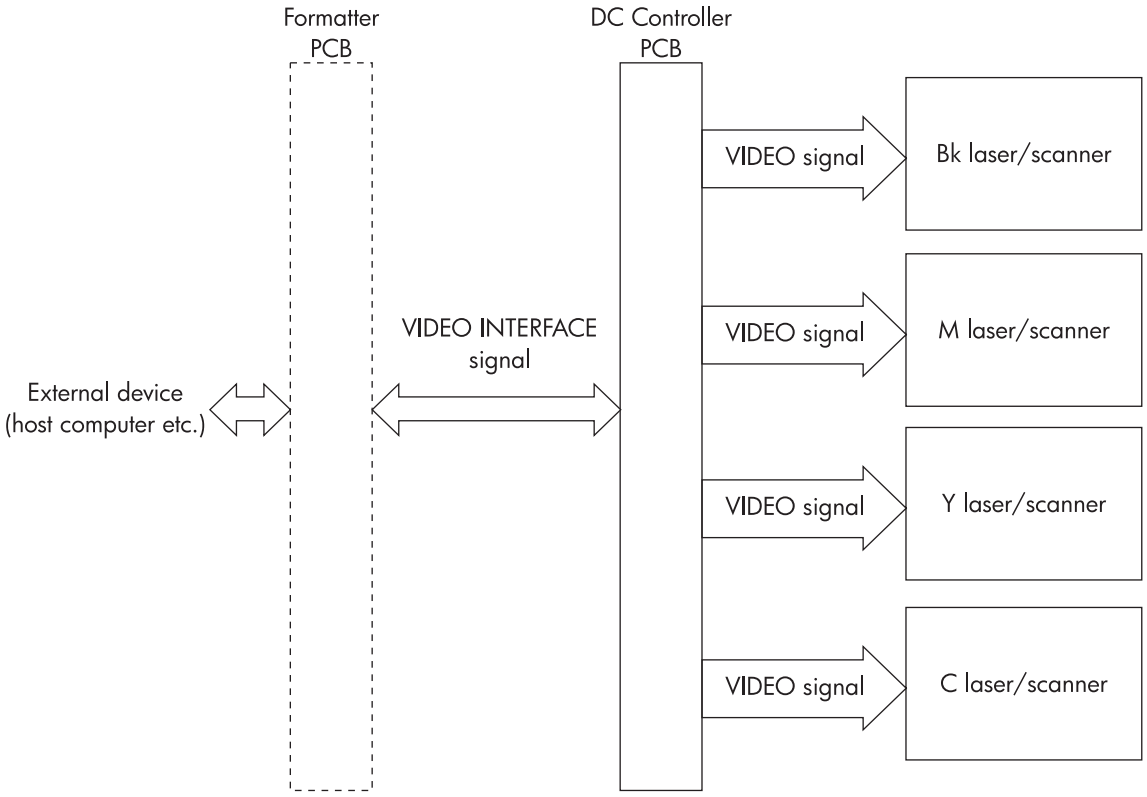

Figure 5-9. **Formatter system**

PowerSave

This feature conserves power after the printer has been idle for an adjustable length of time. Set the time length in the Configure Device menu, under System Setup. When the printer is in PowerSave mode, the control panel backlight is turned off, but the printer retains all printer settings, downloadable fonts, and macros. The default setting is **Powersave on**, with a 30-minute idle time. You can turn PowerSave off in the Configure Device menu, under Resets.

The printer exits PowerSave mode and enters the warm-up cycle when any of the following occurs:

- A print job, valid data, or a PML or PJL command is received at the parallel port, FIR port (for the HP Color LaserJet 5500 models), EIO card, or the USB 1.1 (for the HP Color LaserJet 5550 models).
- A control panel button is pressed.
- The top cover is opened (HP Color LaserJet 5500 models only).
- A paper tray is opened (HP Color LaserJet 5500 models only).
- The engine test button is pressed.

NOTE Printer error messages override the PowerSave message. The printer enters PowerSave mode at the appropriate time, but the error message continues to appear.

Input/Output

This section contains information about input and output devices supported by the HP Color LaserJet 5500 series models.

Parallel interface

The formatter receives incoming data through its bidirectional interface (IEEE-1284). The I/O provides high-speed and two-way communication between the printer and the host, allowing the user to change printer settings and monitor printer status from the host computer. The user can configure the **HIGH SPEED** item in the control panel menu. (This item is found in the **CONFIGURE DEVICE** menu, under **I/O** menu, and **PARALLEL INPUT**.) The default setting, **YES**, allows the I/O to run at the higher speeds supported by most newer computers. When set to **NO**, the parallel interface runs at the slower mode that is compatible with older computers. The user can also configure the **ADVANCED FUNCTIONS** item. The default setting, ON, allows for two-way parallel communications. The **OFF** mode disables the advanced functionality. The I/O is compatible with the bidirectional parallel interface standard.

Expanded I/O (HP Color LaserJet 5500 models only)

The optional HP Fast InfraRed receiver enables wireless printing from any iRDA-compliant portable device (such as a laptop computer) to the printer.

The printing connection is maintained by positioning the sending infrared port within operating range. The connection can be blocked by objects such as a hand or paper, or by direct sunlight or any bright light shining into either infrared port.

Flash (HP Color LaserJet 5500 models only)

Optional flash is available in 4-MB flash memory DIMMs for storing forms, fonts, and signatures. For HP Color LaserJet 5550 models, an optional compact flash is available for storing forms, fonts, and signatures in different sizes.

Hard-disk accessory

The optional hard-disk accessory can be mounted in one of the EIO slots on the rear of the formatter. The optional EIO-based hard disk is used for creating multiple original prints (mopies) and storing forms, fonts, and signatures.

CPU

The HP Color LaserJet 5500 printer formatter incorporates a 400-MHz RISC processor and the HP Color LaserJet 5550 printer formatter incorporates a 533-MHz RISC processor.

Printer memory

If the printer encounters difficulty managing available memory, a clearable warning message will appear on the control panel.

Some printer messages are affected by the auto-continue and clearable warning settings from the Configure Device menu, under System Setup. If **CLEARABLE WARNING = JOB** is set on the control panel, warning messages appear on the control panel until the end of the job from which they were generated. If **CLEARABLE WARNING = ON** is set, warning messages appear on the control panel until ✔ is pressed. If an error occurs that prevents printing and **AUTO CONTINUE = OFF** is set, the message appears until ✔ is pressed.

Read-only memory

Besides storing microprocessor control programs, the read-only memory (ROM) stores dot patterns of internal character sets (fonts).

Random-access memory

The random-access memory (RAM) contains the page, I/O buffers, and the font storage area. It stores printing and font information received from the host system, and can also serve to temporarily store a full page of print-image data before the data is sent to the print engine. Memory capacity can be increased by adding DIMMs to the formatter. Note that adding memory (DIMMs) might also increase the print speed for complex graphics.

Firmware DIMM (HP Color LaserJet 5500 models)

To upgrade printer firmware, locate and use the latest firmware at http://www.hp.com/support/clj5500.com or http://www.hp.com/support/clj5550.com.

Firmware compact flash (HP Color LaserJet 5550 models)

To upgrade printer firmware, locate and use the latest firmware at http://www.hp.com/support/clj5500.com or http://www.hp.com/support/clj5550.com.

Nonvolatile memory

The printer uses nonvolatile memory (NVRAM) to store I/O and information about the print environment’s configuration. The contents of NVRAM are retained when the printer is turned off or disconnected.

PJL overview

Printer job language (PJL) is an integral part of configuration, in addition to the standard printer command language (PCL). With standard cabling, PJL allows the printer to perform functions such as:

- Two-way communication with the host computer through a bidirectional parallel connection. The printer can tell the host about such things as the control panel settings, and it allows the control panel settings to be changed from the host.
- Dynamic I/O switching allows the printer to be configured with a host on each I/O. The printer can receive data from more than one I/O simultaneously, until the I/O buffer is full. This can occur even when the printer is offline.
- Context-sensitive switching allows the printer to automatically recognize the personality (PS or PCL) of each job and configure itself to serve that personality.
- Isolation of print environment settings from one print job to the next. For example, if a print job is sent to the printer in landscape mode, the subsequent print jobs print in landscape only if they are formatted for landscape printing.

PML

The printer management language (PML) allows remote configuration and status readback through the I/O ports.

Control panel

The formatter sends and receives printer status and command data to and from a control panel board.

Laser/scanner system

The laser/scanner system receives a signal from the formatter and forms a latent image on the photosensitive drum in the print cartridge. The printer has a separate laser/scanner unit for each color. Each of these has the same structure, which is shown in Figure 5-10. Laser/scanner system.

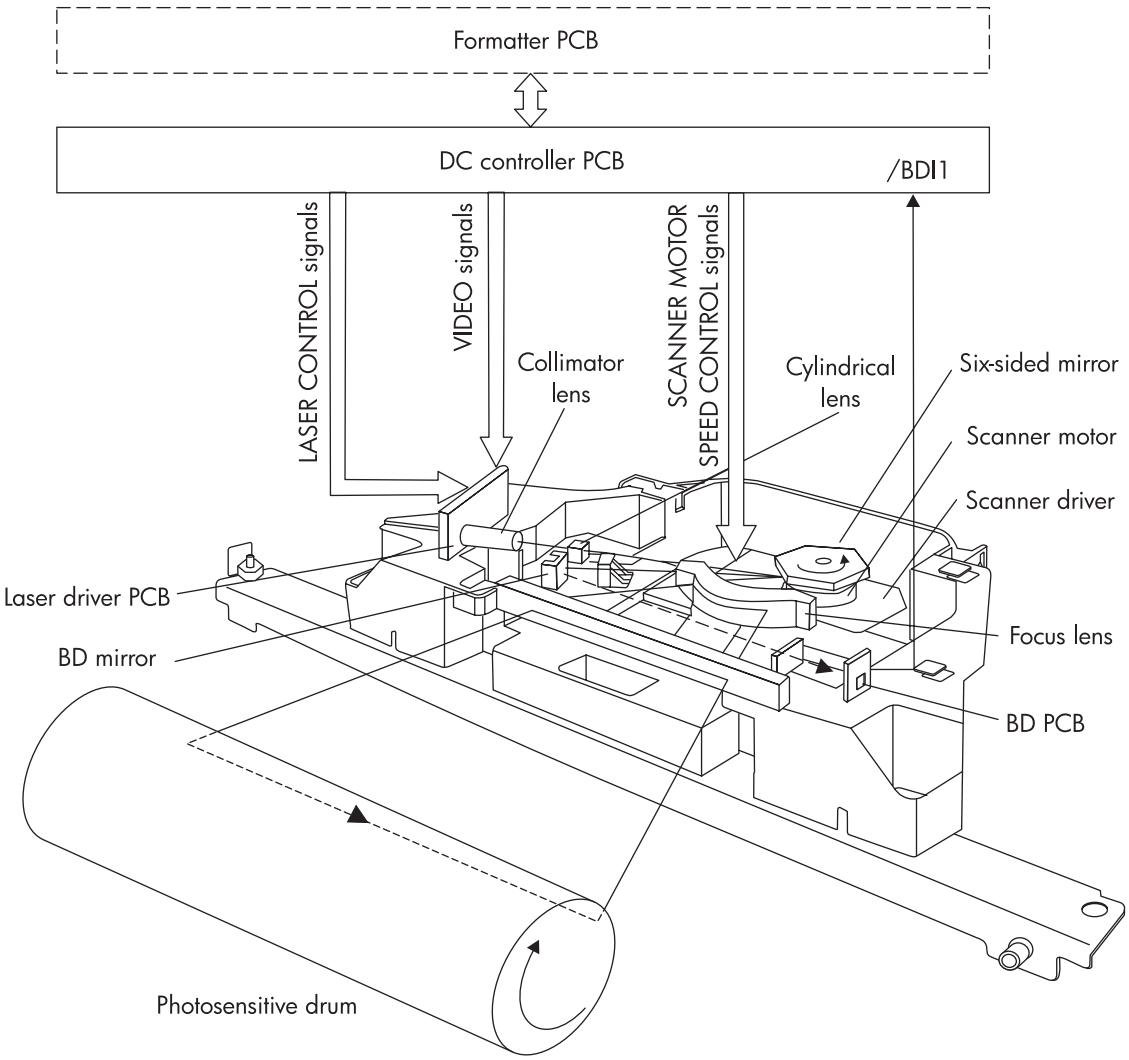

Figure 5-10. **Laser/scanner system**

Scanner motor control

The scanner motor control rotates the scanner motor at a constant speed in order to place the laser beam at the proper position on the photosensitive drum. The illustration below shows the circuit diagram for the scanner motor control.

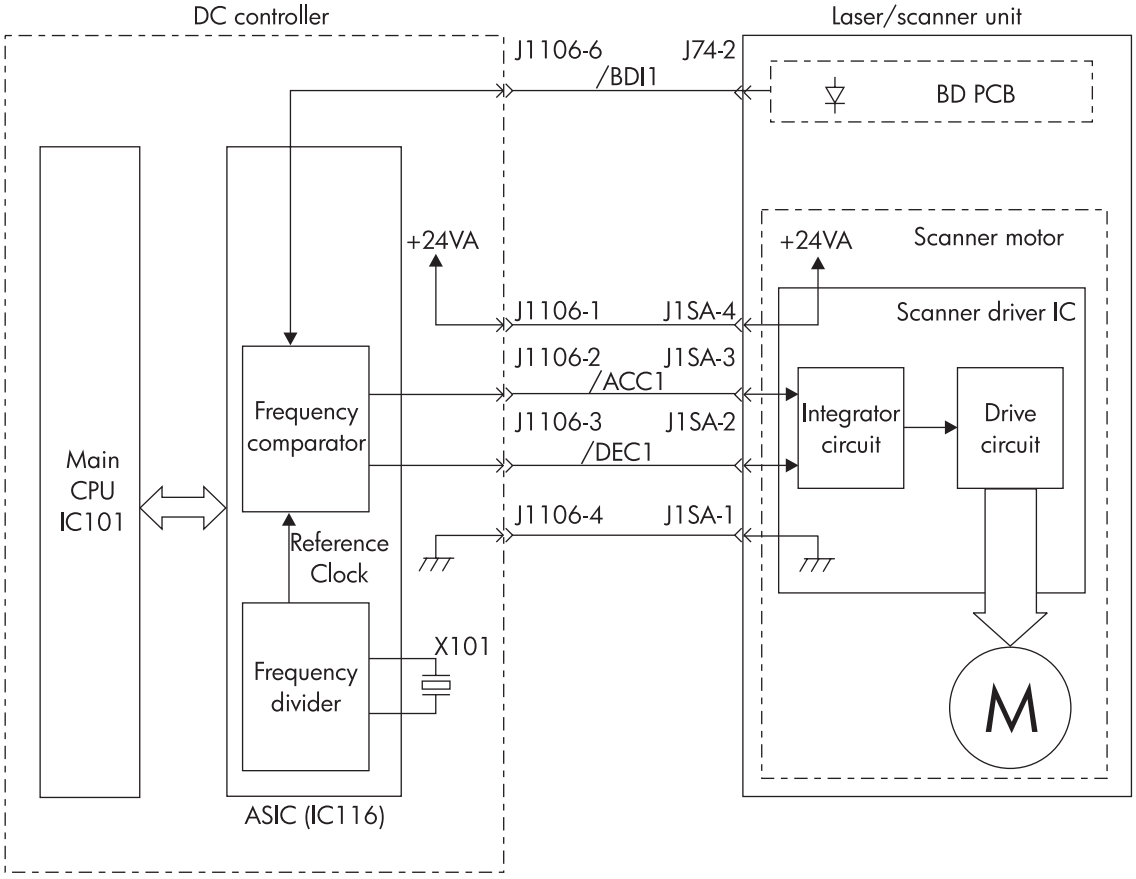

Figure 5-11. **Scanner motor control circuit**

Image formation system

The image formation system is the central hub of the printer. Figure 5-12. Image formation system shows the image formation system. During image formation, an image of colored toner is formed and then fused onto the paper. The image formation system consists of the following physical components:

- four laser/scanners
- four print cartridges
- ETB
- fuser

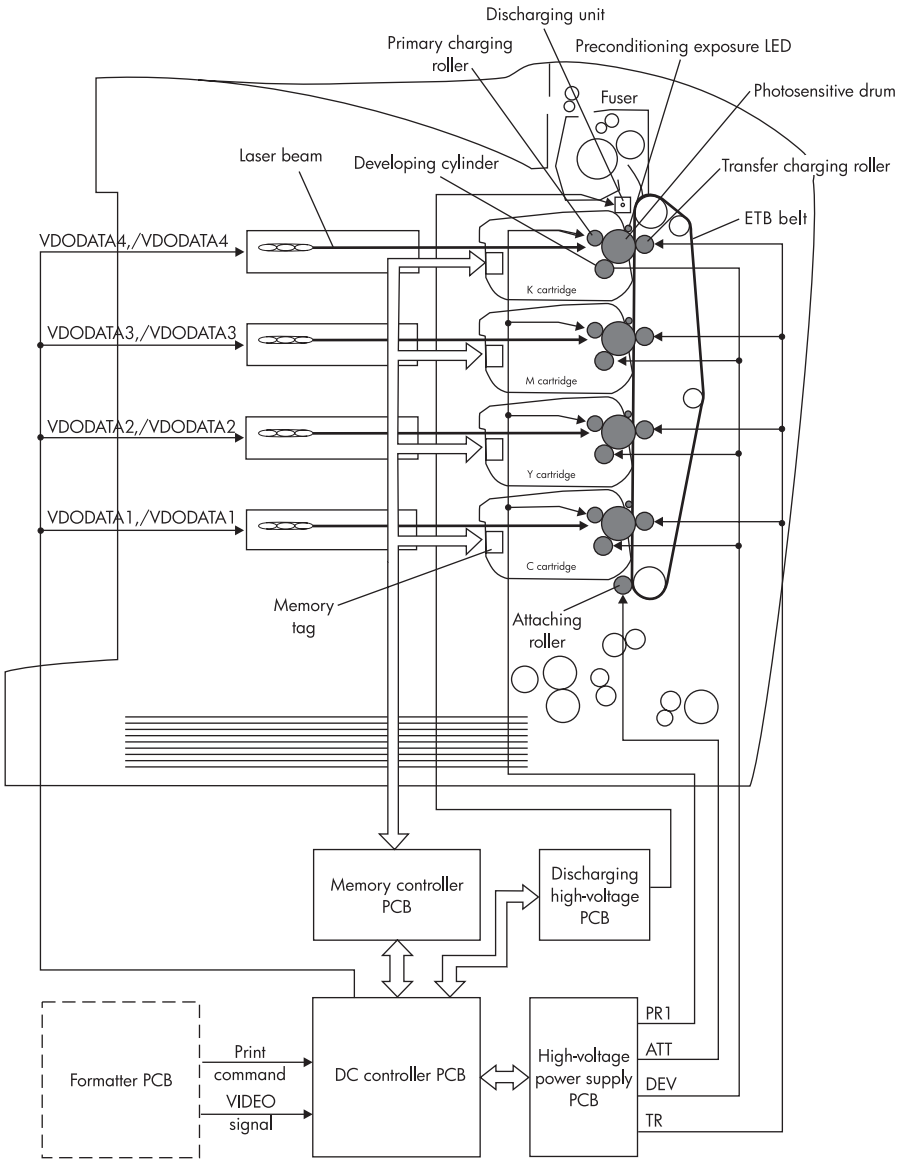

Figure 5-12. **Image formation system**

Image formation process

The image formation process consists of eleven steps divided among five functional blocks:

- electrostatic latent image formation block
- developing block
- transfer block
- fusing block
- cleaning block

Figure 5-13. Image formation process illustrates the process. The next sections describe the print cartridges and the ETB in detail, followed by a description of each functional block. The image formation steps are numbered consecutively through the blocks.

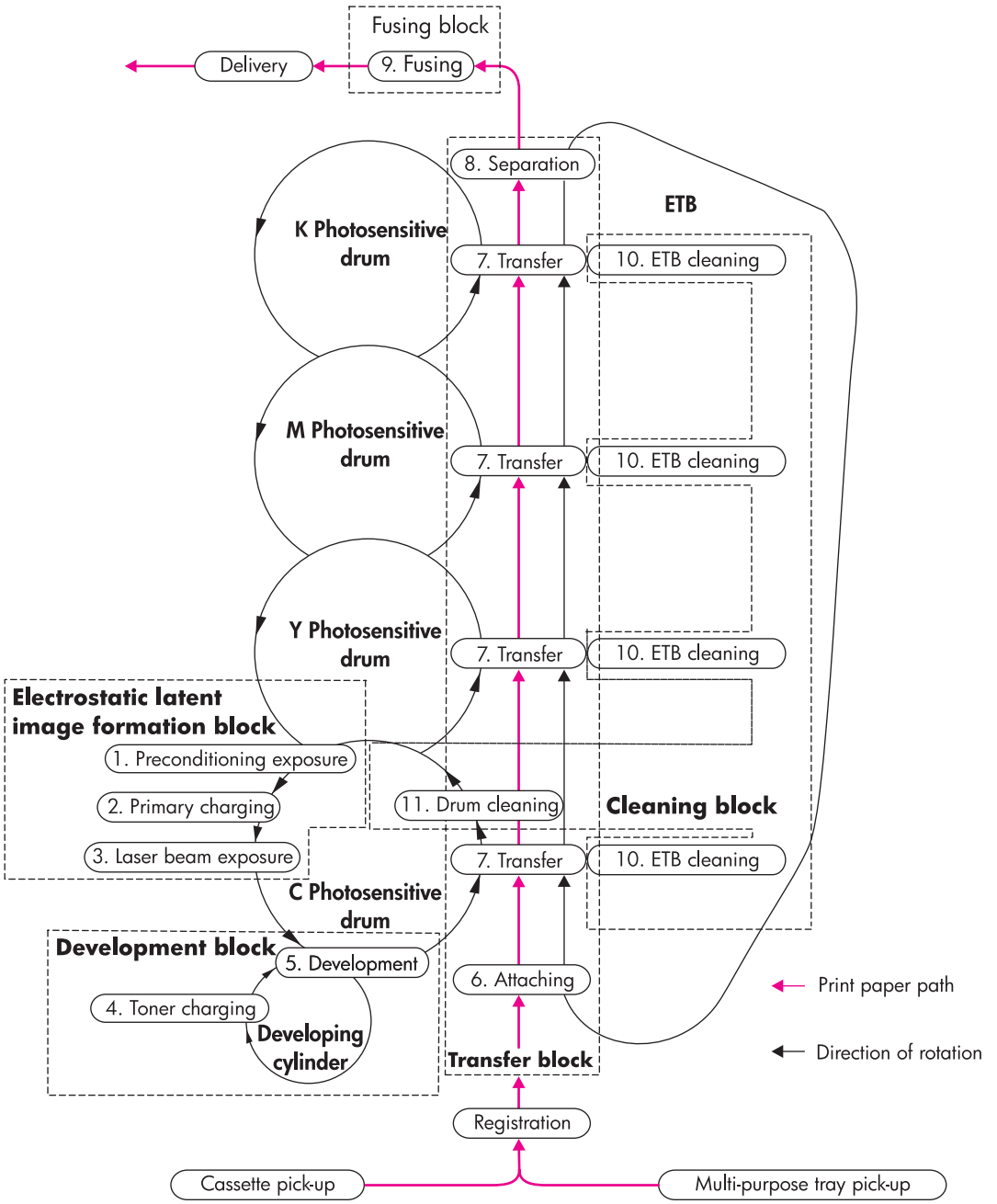

Figure 5-13. Image formation process

Print cartridges

The printer has four different print cartridges, one for each color. However, they share the same structure, shown in Figure 5-14. Print cartridge.

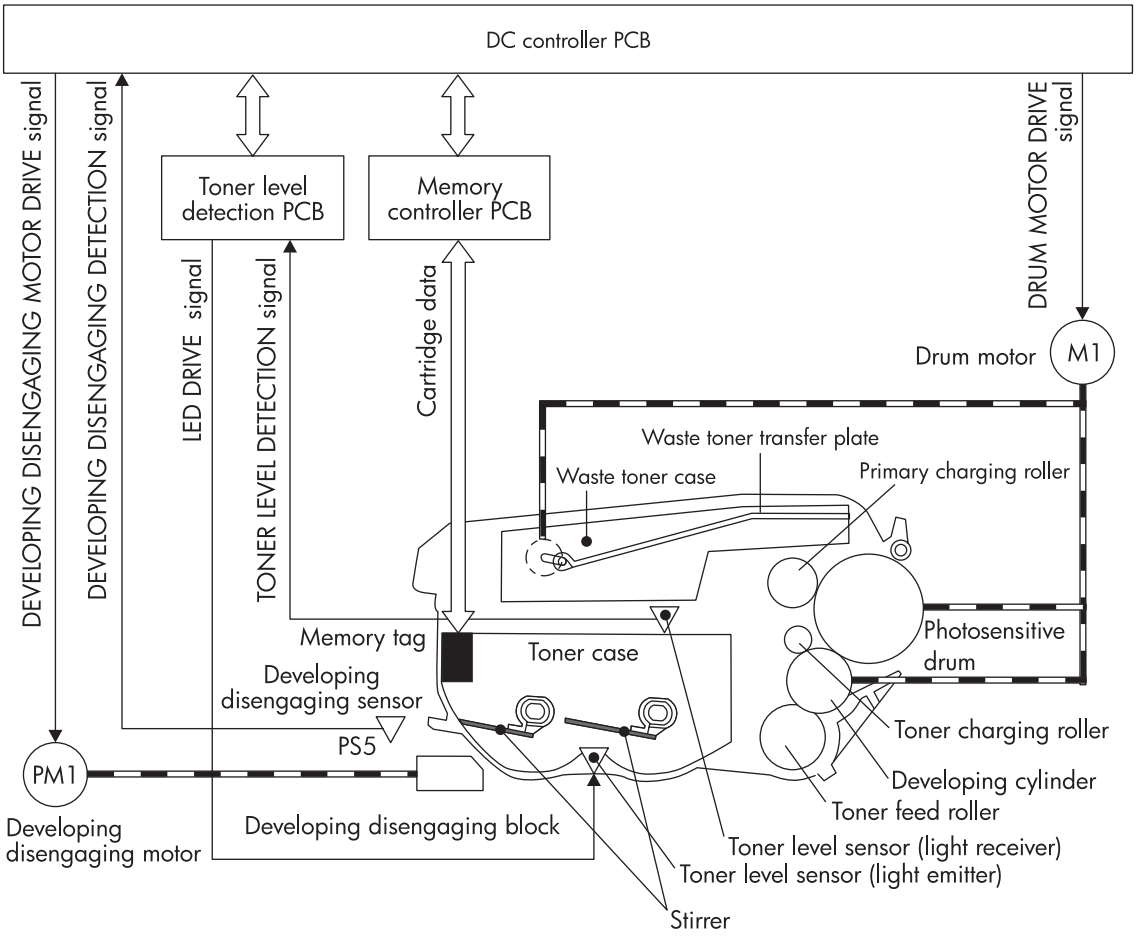

Figure 5-14. **Print cartridge**

The physical components inside the print cartridge are the following:

- photosensitive drum
- primary charging roller
- developing cylinder
- toner charging roller
- stirrers
- waste toner transfer plate

The photosensitive drum's rotation drives the primary charging roller. All other components are driven by the drum motor.

The developing disengaging motor drives the developing disengaging block, which causes the developing cylinder to engage with or disengage from the photosensitive drum.

The DC controller uses an LED and a photo diode to monitor the level of toner inside the cartridge. It stores this information on a memory tag built into each cartridge.

The primary charging roller and the toner charging roller are cleaned at the start of each print operation to avoid image defects.

Memory tag

The memory tag is an EEP-ROM built into the print cartridge. It stores information about the amount of toner in the cartridge and estimates the remaining life. Figure 5-15. Memory tag describes how the memory tag operates.

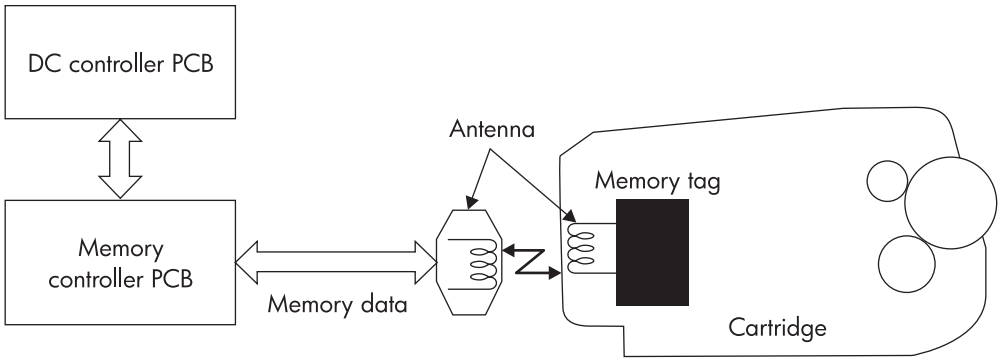

Figure 5-15. **Memory tag**

The DC controller reads information from the memory tag whenever the printer is turned on, whenever the top cover is closed, and whenever it receives a READ command from the formatter.

The DC controller writes information to the memory tag at specified times during a print operation and whenever it receives a WRITE command from the formatter.

If the DC controller is unable to either read to or write from the memory tag four times in a row, the DC controller alerts the formatter of a memory tag abnormality.

Toner level detection

The printer monitors print cartridge life in several ways to ensure continued high print quality:

- The number of developer rotations measures the usefulness (charge) of the toner.
- The toner sensor monitors remaining toner, and informs the user of "low" or "out" conditions.
- The number of photosensitive drum rotations measures the life of the photosensitive drum, which degrades slightly with each rotation.

The cartridge life represented on the supplies status page and in the gauges on the control panel is a combination of all three of these components. The lowest remaining percent is the number reported to the customer. However, information about which of these components is low or out is not reported.

During the life of a print cartridge, the customer receives three different control panel messages:

- **CLEARABLE WARNINGS**. The cartridge has between 15 and 100% life remaining.
- **ORDER <COLOR> CARTRIDGE**. The cartridge has 15% life remaining. In typical printing situations, this represents about 2 weeks of use.
- **REPLACE <COLOR> CARTRIDGE**. One of the three components listed above has reached its end of life. The printer stops, and printing cannot continue until the cartridge is replaced.

Developer rotations

The developer rollers rotations are tracked on the print cartridge's memory tag (e-label). Tracking rotations enables the printer to signal that a print cartridge is low or out before the developer and/or toner is actually worn out, which would result in print quality defects.

Over time, the toner loses its required properties due to excessive stirring and re-charging. Although the cartridge will correctly signal LOW or OUT because of wear, some toner might remain in the fresh toner hopper.

In addition to toner wear, the developer roller experiences wear during its life, so developer life tracking is necessary. In situations where low-coverage documents are printed frequently, the developer rotations might cause a LOW message before the toner level reaches its low level.

Toner sensor

For the first 75% of the cartridge life, toner depletion within the cartridge is calculated by pixel counting. An optical toner level sensor then tracks the final 25% of toner. The toner is measured and then reported on the toner gas gauge on the control panel or on the supplies status page. The transition from pixel counting to optical toner-level sensing causes no fluctuations on the toner gas gauge. Some toner might remain in the fresh toner hopper due to other cartridge components reaching their end of life.

Photosensitive drum rotations

Photosensitive drum rotations are also tracked on the cartridge's memory tag. Similar to the developer roller, tracking these rotations enables the printer to signal that a print cartridge is low or out before the photosensitive drum is actually worn out, when print quality defects would occur. The photosensitive drum might cause a low message when low-coverage documents are printed frequently. Tracking drum life is essential because of drum wear and the potential for overflow from the waste toner hopper if the photosensitive drum life is extended past its useful life.

Figure 5-16. Toner level detection illustrates the toner level detection system.

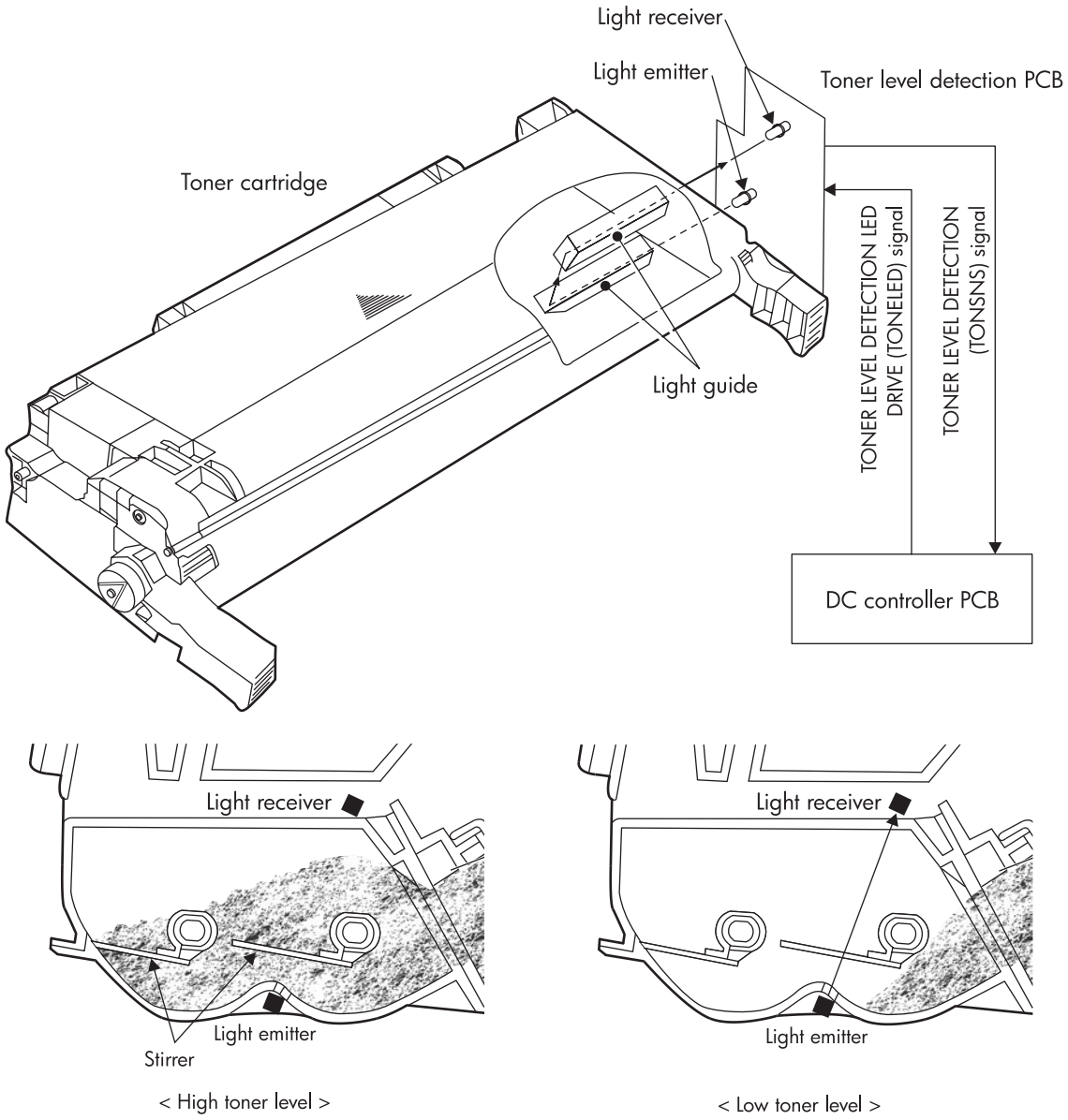

Figure 5-16. Toner level detection

Developing cylinder disengaging control

Whenever the developing cylinder is in contact with the photosensitive drum, toner is passed onto the drum. At certain times, such as during ETB cleaning or during monochrome printing, toner should not pass onto the drum, and the developing cylinder should not be in contact with the drum. The bottom half of the print cartridge can pivot up and down, causing the developing cylinder to either come in contact with or move away from the photosensitive drum. A small block inside the printer causes each cartridge to pivot. When the block is pushed up, the rear of the cartridge is pushed up, and the front of the cartridge swings down. The developing cylinder disengages from the drum. Figure 5-17. Developing cylinder disengaging illustrates this process.

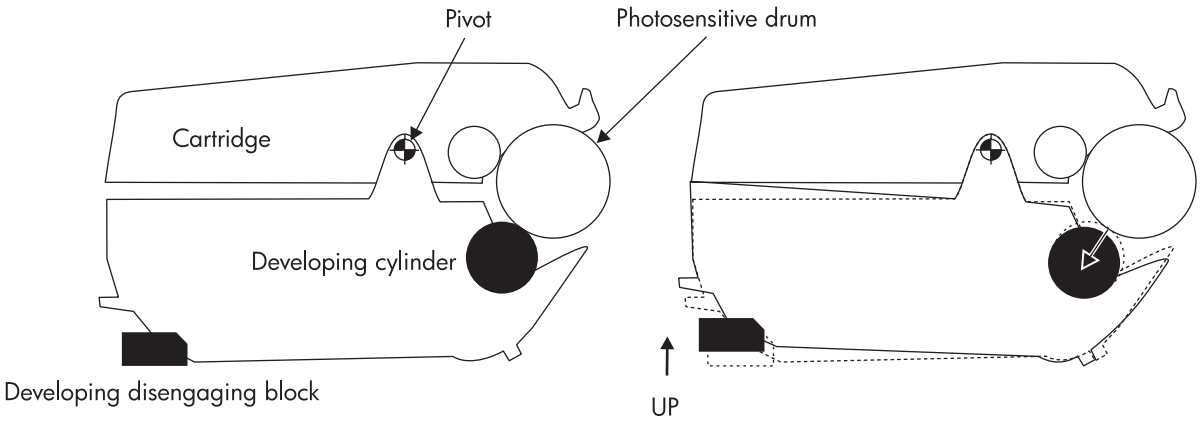

Figure 5-17. Developing cylinder disengaging

The developing cylinders are disengaged only during monochrome printing or during ETB cleaning. During monochrome printing, the developing cylinder in all cartridges except black is disengaged. During ETB cleaning, the developing cylinders in all cartridges are disengaged.

Electrostatic transfer/transport belt (ETB) unit

The ETB unit feeds the paper through the printer and helps transfer toner onto the paper. Figure 5-18. ETB unit illustrates the ETB unit.

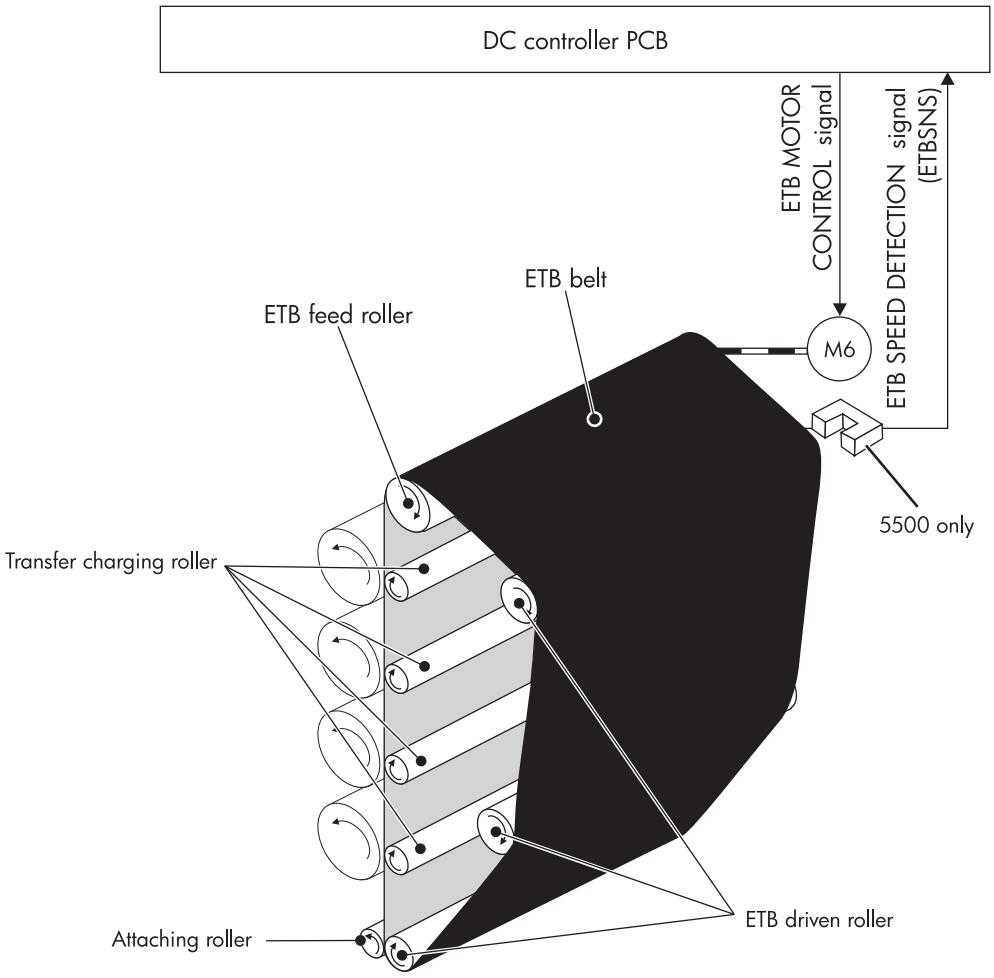

Figure 5-18. **ETB unit**

The physical components of the ETB unit are the following:

- ETB belt
- ETB feed roller
- attaching roller
- transfer charging rollers (four)
- ETB-driven rollers (three)

The ETB motor drives the ETB feed roller, causing the belt to rotate. All other rollers are driven by the belt rotation.

A sensor at the top of the ETB unit detects the ETB's speed. The DC controller maintains a constant ETB feed speed to ensure good color registration.

Electrostatic latent image formation block

The image formation process begins with the electrostatic image formation block, in which an electrostatic latent image is formed on the photosensitive drum. This block consists of three steps:

- primary exposure
- primary charging
- laser beam exposure

After the last step is completed, areas of the drum surface that have not been exposed to the laser beam retain a negative charge. The areas exposed to the laser are neutralized. This neutralized image is called an electrostatic latent image because it is invisible to the eye.

Step 1: Primary exposure

To prepare for primary charging, light from the primary exposure LED strikes the photosensitive drum surface. This eliminates any residual charge on the drum surface in order to avoid inconsistent charge density. Figure 5-19. Primary exposure illustrates this step.

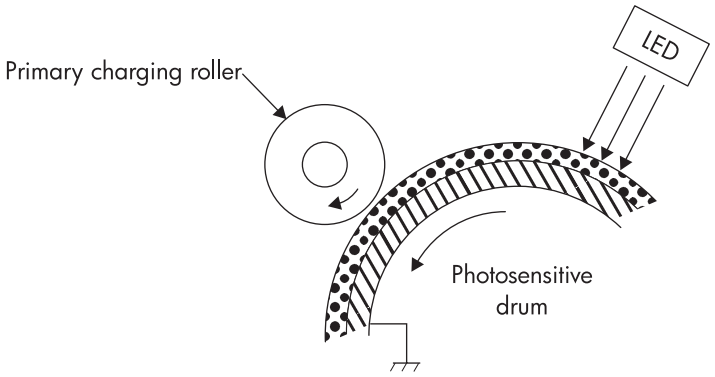

Figure 5-19. **Primary exposure**

Step 2: Primary charging

To prepare for latent image formation, a uniform negative potential is applied to the photosensitive drum surface. The primary charging roller is made of a conductive rubber. DC bias is applied to the primary charging roller to maintain uniform potential on the drum surface. Figure 5-20. Primary charging illustrates this step.

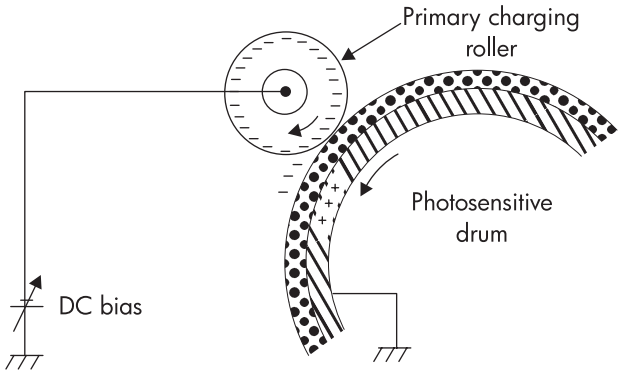

Figure 5-20. **Primary charging**

Step 3: Laser beam exposure

As the laser beam scans the drum surface, it neutralizes the negative charge. This is the electrostatic latent image. The remaining areas, where the laser beam has not struck, retain a negative charge. Figure 5-21. Laser beam exposure illustrates this step.

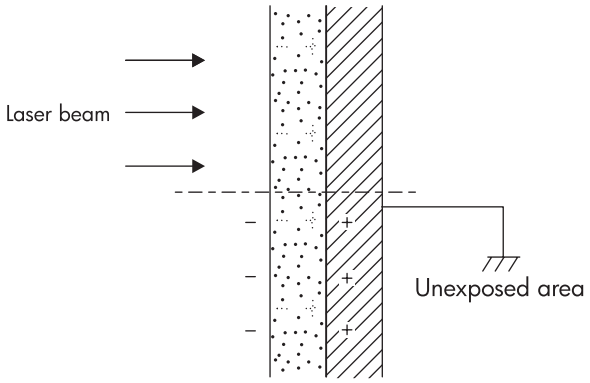

Figure 5-21. **Laser beam exposure**

Development block

The second part of the image formation process is the development block, in which toner is transferred onto the electrostatic latent image on the surface of the photosensitive drum, creating a visible image. This printer uses a contact development method that keeps the developing cylinder in contact with the drum, pushing the toner against the drum surface for development. The toner is non-magnetic and consists of resins. This block consists of two steps:

- toner charging
- development

Figure 5-22. Development block shows a cross-section of a print cartridge and illustrates the development block.

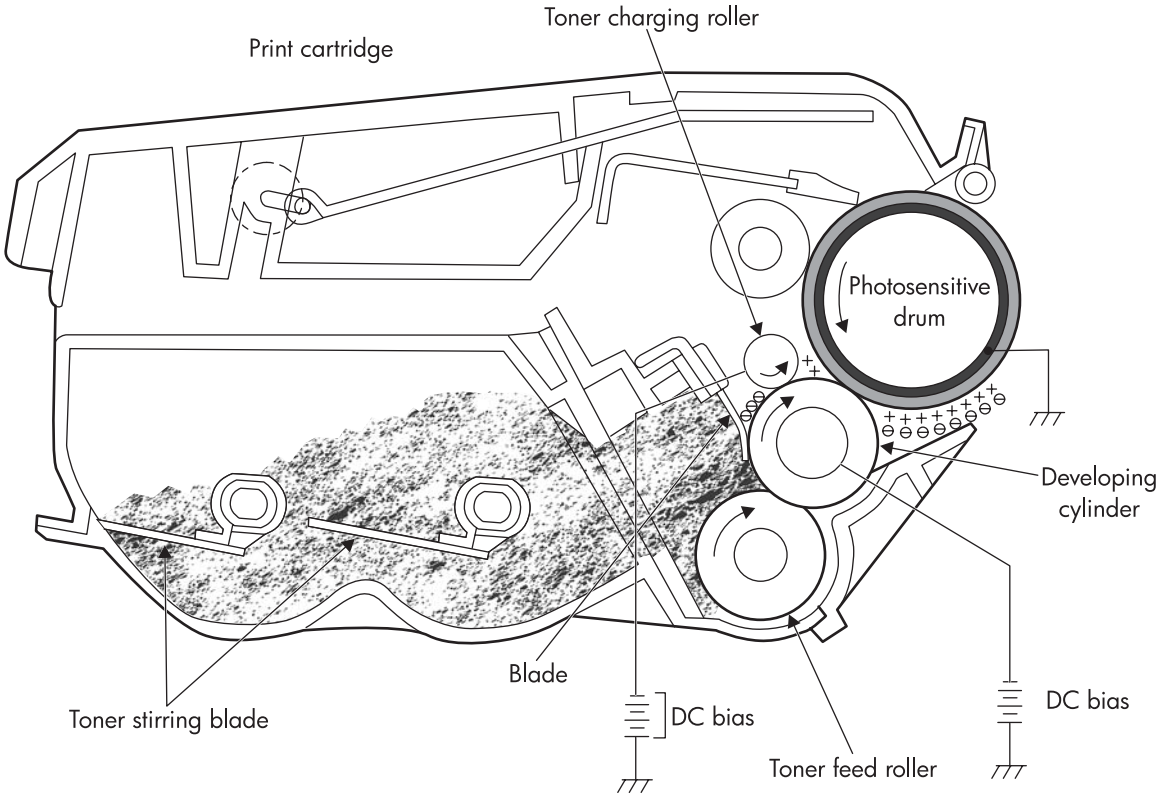

Figure 5-22. Development block

Step 4: Toner charging

As the toner stirring blade turns inside the cartridge, the friction creates a negative potential on the toner. A negative voltage is applied to the toner charging roller and creates a uniform negative potential on the toner.

Step 5: Development

The areas on the photosensitive drum that have been exposed to the laser beam have a higher potential (are less negatively charged) than the toner particles on the developing cylinder. As the photosensitive drum rotates, the toner adheres to the exposed areas on the photosensitive drum. At this point, the image is visible on the drum surface.

Transfer block

The third part of the image formation process is the transfer block, in which the toner image is transferred from the photosensitive drum to the paper. This block consists of three steps:

- attaching
- transfer
- separation

Step 6: Attaching

After the paper is picked up from the input tray, the attaching roller pushes it against the ETB. The attaching roller has a positive DC bias, and it creates a positive charge on the paper. Figure 5-23. Attaching the paper to the ETB illustrates this step.

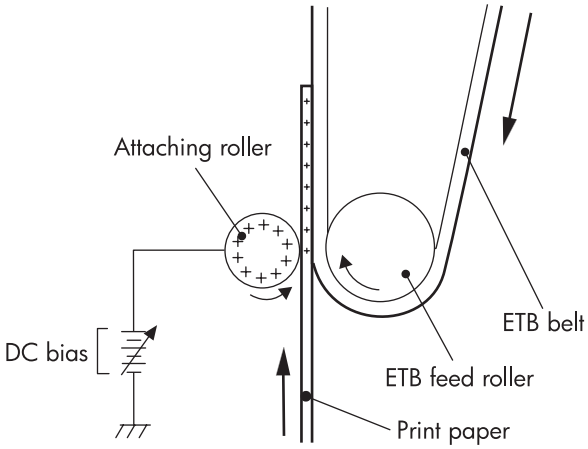

Figure 5-23. **Attaching the paper to the ETB**

Step 7: Transfer

A positive bias is applied to the transfer charging roller, which is directly opposite the photosensitive drum. As the ETB passes the transfer charging roller, it picks up a positive charge. The negatively charged toner on the photosensitive drum is transferred to the positively charged paper. Figure 5-24. Toner transfer illustrates this step. This process is repeated for each color as the ETB carries the paper from the bottom cartridge to the top (C, Y, M, K).

In four-color printing, as four colors of toner are piled up on the paper, the holding force of the toner weakens as the transfer process progresses. To counteract this effect, the DC controller increases the positive DC bias applied to the transfer charging roller for each successive color.

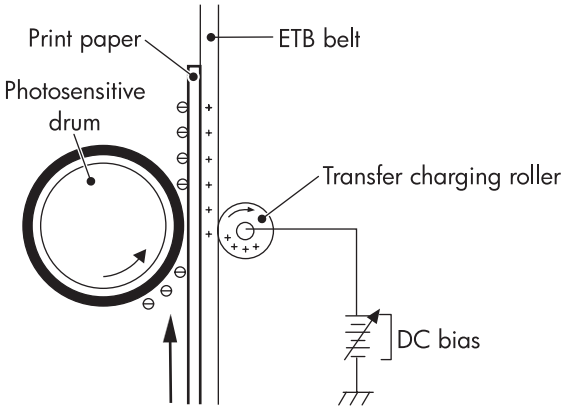

Figure 5-24. **Toner transfer**

Step 8: Separation

The paper's elasticity causes it to separate from the ETB as the ETB reaches the top of its path. Figure 5-25. Separation illustrates this step.

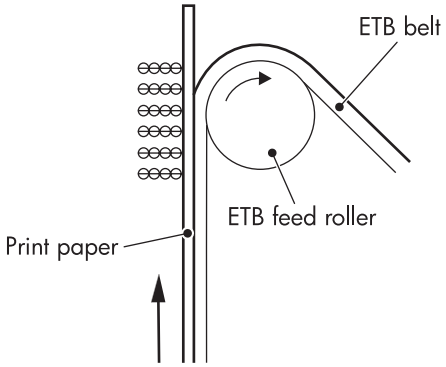

Figure 5-25. **Separation**

Fusing block

The fourth part of the image formation process is the fusing block, in which the toner image is fused to the paper, making a permanent image that cannot be smeared. This block consists of one step: fusing.

Step 9: Fusing

This printer uses the induction heating method to fuse the toner to the paper. This method uses quick fuser heating, resulting in shortened wait time and reduced power consumption. Figure 5-26. Fusing illustrates this step.

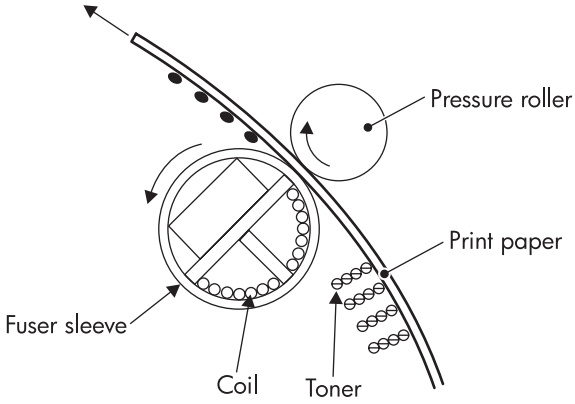

Figure 5-26. **Fusing**

Fuser motor speed control

The fuser motor speed control for HP Color LaserJet 5550 models is explained in this section.

The HP Color LaserJet 5550 printer controls the motor speed in the same way the HP Color LaserJet 5500 models does, except the HP Color LaserJet 5550 printer has two fixing paper sensors: PS81 and PS82—to control the warp of specific types of thick paper.

There are two fixing paper detection flags, one for the PS81, and another for the PS82. These flags shield their respective sensors. The sensors enable the DC controller to monitor the warp of paper more closely than the HP Color LaserJet 5500 models can.

Thick paper is fed, the DC controller speeds up the fixing motor earlier than it does when a normal paper is fed. This ensures minimal warping and prevents image distortion that can be caused by paper thickness.

NOTE The specific thick paper refers to the paper specified for the print mode, Thick Paper 2. Thick paper is firmer than normal paper. The image can be distorted during transfer if the paper is heavily warped and is pushed back toward the ETB. This is especially true of thick paper with a high basic weight (grammage) that needs to have its warp diminished.

Cleaning block

The fifth and final part of the image formation process is the cleaning block, in which the ETB and the photosensitive drums are cleaned, preparing them for the next print. The next section provides more information about printer calibration and cleaning. This block consists of two steps:

- ETB cleaning
- photosensitive drum cleaning

Step 10: ETB cleaning

See ETB cleaning for a complete discussion of ETB cleaning.

Step 11: Photosensitive drum cleaning

See Photosensitive drum cleaning for a complete discussion of photosensitive drum cleaning.

Calibration and cleaning

The printer automatically calibrates and cleans itself at various times to maintain the highest level of print quality. You can also force the printer to calibrate by choosing **CALIBRATE NOW** from the Print Quality menu. See Calibrate now (HP Color LaserJet 5500 models only).

While the printer is calibrating or cleaning, it will pause printing. For most calibrations and cleanings, the printer will not interrupt a print job, but will wait for the job to complete before calibrating or cleaning. Table 5-3. Calibration timing and duration shows when the printer calibrates, the duration of the calibration, and the type of calibration that occurs. Table 5-4. Cleaning timing and duration shows when the printer cleans and the duration of the cleaning. The sections that follow discuss calibration and cleaning in more detail.

NOTE The times listed in the tables below are preliminary and are subject to change.

NOTE Certain error conditions can cause some calibrations to repeat which will increase the duration listed in the table below.

Table 5-3. Calibration timing and duration

Calibration occurrence	Duration	Type of calibration
When you turn the printer on.	75 seconds for calibration, but because of other initialization activities, the printer takes a total of 2 minutes to be ready for printing	DMAX, DHALF Warm (1:10) (HP Color LaserJet 5550 models) Cold (2:10) (HP Color LaserJet 5550 models)
When you install one or more print cartridges that have not previously been installed in the printer.	150 seconds (2 minutes, 30 seconds)	DMAX, DHALF, color plane registration (CPR) CPR, DMAX, DHALF (2:25) (HP Color LaserJet 5550 models)
After 50 pages have printed since installing a print cartridge. The printer will finish printing the current job before calibrating.	75 seconds 60 seconds (HP Color LaserJet 5550 models)	DMAX, DHALF
After 1000 pages have printed since the last calibration. The printer will finish printing the current job before calibrating.	75 seconds 60 seconds (HP Color LaserJet 5550 models)	DMAX, DHALF
After 8 hours since the last calibration, but not while the printer is in PowerSave mode. Typically, this calibration occurs on the first job or control panel interaction after an overnight idle period.	75 seconds 60 seconds to ready, 70 seconds to belt stop (HP Color LaserJet 5550 models)	DMAX, DHALF

Table 5-3. Calibration timing and duration (continued)

Calibration occurrence	Duration	Type of calibration
When you request calibration from the control panel (Calibrate Now).	280 seconds (4 minutes, 40 seconds)	DMAX, DHALF, CPR, drum phase
Quick Calibration Now (HP Color LaserJet 5550 models only)	60 seconds (HP Color LaserJet 5550 models)	DMAX, DHALF (4:05) (HP Color LaserJet 5550 models)
Full Calibrate HP Color LaserJet 5550 models only)	280 seconds (4 minutes, 40 seconds)	DMX,DHALF

Table 5-4. Cleaning timing and duration

Cleaning occurrence	Duration	Type of cleaning
When the printer continuously prints (with no idle period or spin down) for 51 pages.	either 5 seconds or 21 seconds (5 seconds is the most common)	primary and toner charging rollers
At intervals of between 90 and 140 pages. The printer will finish printing the current job before cleaning.	16 seconds	ETB

NOTE An NVRAM INIT will not always correct all CPR problems. NVRAM INIT only erases calibration values from NVRAM in the formatters. If you have done a full calibration and still have CPR issues, you should clear the NVRAM in the DC Controller. Currently, there is no feature available in the control panel to reset calibration values for both formatter and DC Controller. To perform the reset, open the top cover and press the Engine Test button for a few seconds. When you close the cover, the control panel display will indicate that the printer is performing a calibration. The calibration values are being cleared from the Controller NVRAM. This procedure might also be required to recover CPR.

ETB cleaning

During this step, all toner particles that remain on the ETB are returned to the photosensitive drums in each print cartridge. ETB cleaning illustrates this step.

The ETB is automatically cleaned when the printer is turned on, when the covers are closed, and after printing a specified number of pages. The DC controller applies negative bias to the photosensitive drums and either a positive or negative bias to the transfer charging rollers. This creates a difference in potential between the photosensitive drums and the ETB. Both positive and negative residual toner returns to the photosensitive drums.

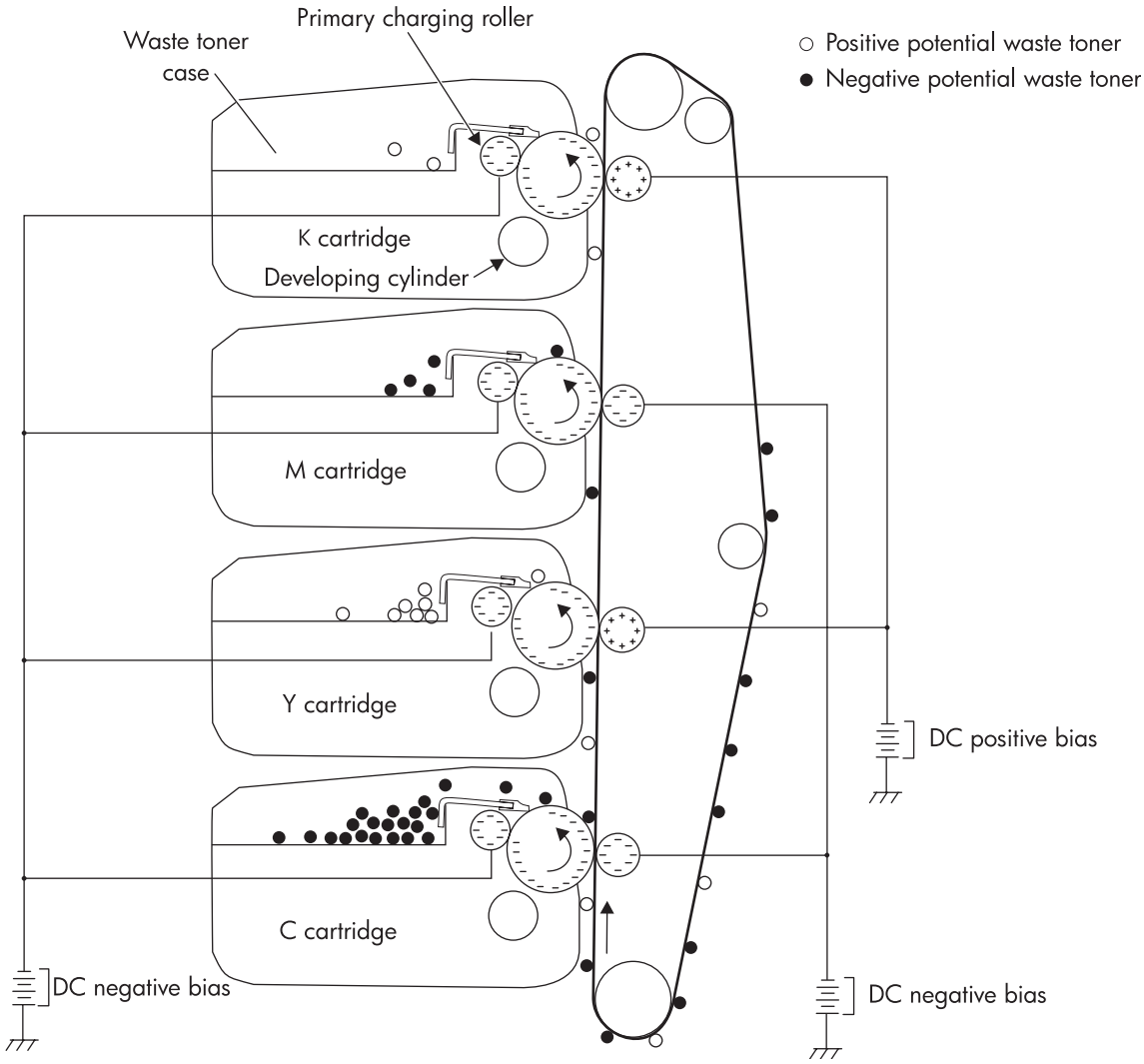

Figure 5-27. **ETB cleaning**

Photosensitive drum cleaning

A cleaning blade inside the print cartridge clears the remaining toner on the photosensitive drum as the drum rotates past the blade. This waste toner is moved into the waste toner container in the top of the print cartridge. Figure 5-28. Drum cleaning illustrates this step.

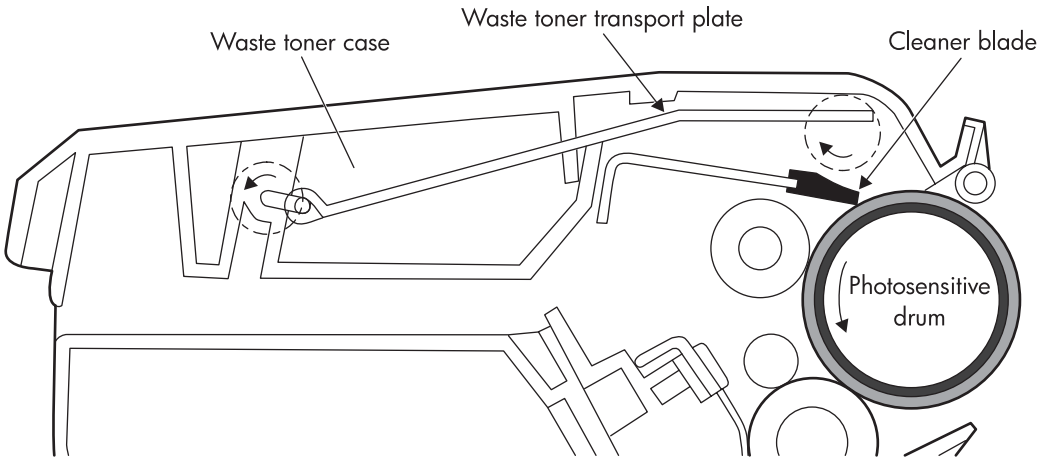

Figure 5-28. **Drum cleaning**

During the printing process, toner adheres to the primary charging roller and the toner charging roller. To prevent print quality defects, this toner needs to be cleaned. The DC controller alternately applies negative bias in different values to the primary charging roller and the toner charging roller when one of the following occurs:

- The printer is turned on.
- The covers are closed.
- At the start of a print operation.
- After printing a specified number of pages.

Applying bias removes the toner from each roller. The toner on the primary charging roller is transferred to the photosensitive drum, and the toner on the toner charging roller is transferred to the developing cylinder. Then the cleaning blade scrapes the toner on the photosensitive drum into the waste toner container, as described above. The toner on the developing cylinder is returned to the toner case. Figure 5-29. Primary charging roller and toner charging roller cleaning illustrates this process.

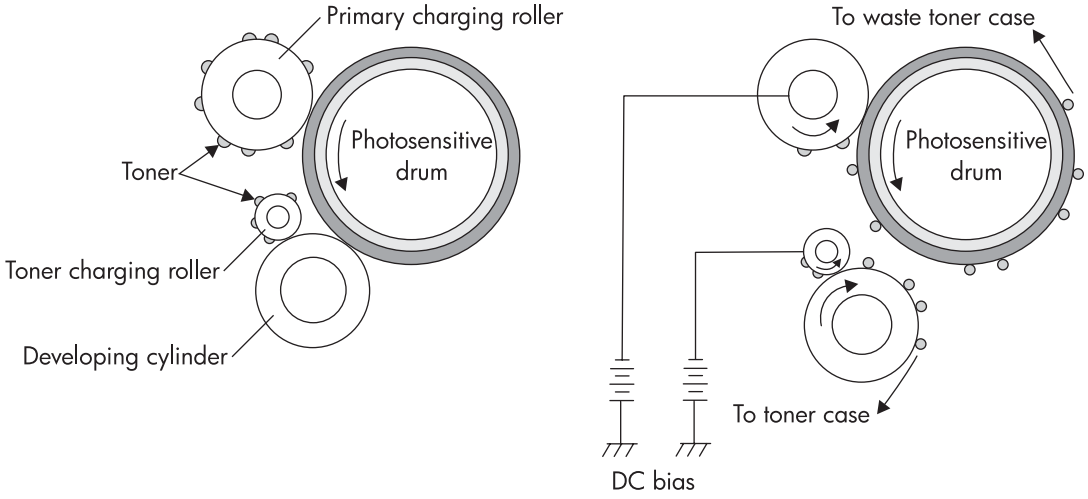

Figure 5-29. **Primary charging roller and toner charging roller cleaning**

Color plane registration calibration

The diameter of the rollers in individual print cartridges or ETB units varies from one to another. For this reason, whenever a new print cartridge or ETB unit is installed, the printer must adjust the rotational speed of the rollers in order to ensure good color plane registration. Color misregistration occurs when the individual colors do not print directly on top of one another, causing poor print quality. This adjustment consists of two steps:

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1. **Direct calibration.** The DC controller uses the color registration detection unit to measure the color registration range directly and calibrate the color registration.

2. **Indirect calibration.** The DC controller monitors the rotational speed of each feed roller and controls the speed to prevent color misregistration.

   Figure 5-30. Color registration calibration illustrates this process.

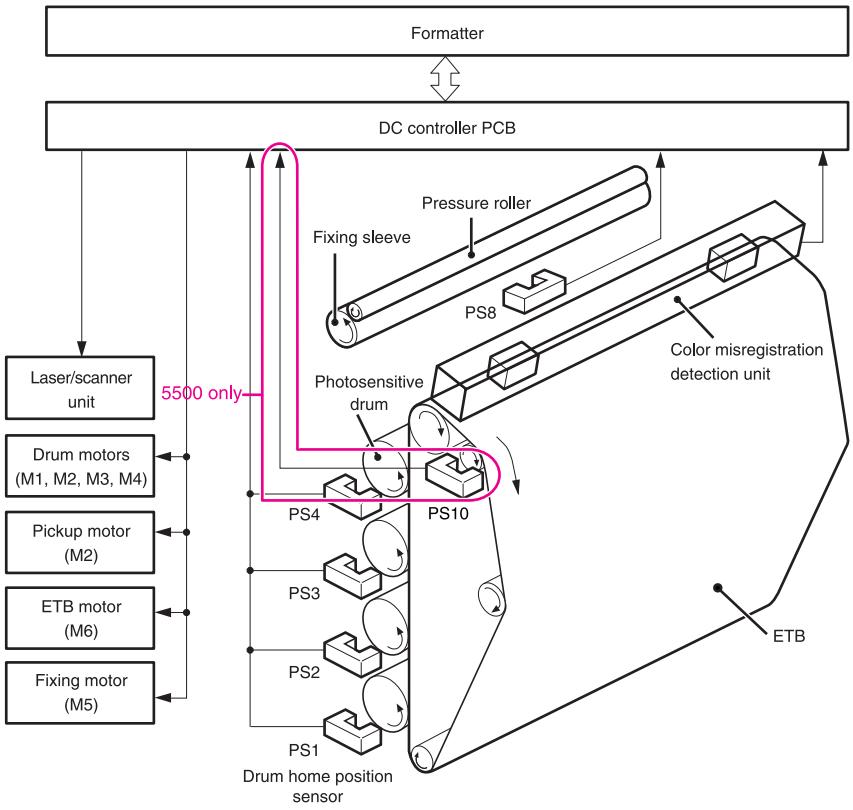

Figure 5-30. **Color registration calibration**

Drum phase calibration

The drum phase calibration aligns all four cartridge motors and their drive gears.

Image stabilization control

As the print cartridge ages, the toner and the photosensitive drum begin to deteriorate, which can cause fluctuations in image density. The printer accounts for this with image stabilization control. There are two kinds of image stabilization control:

- image density calibration control
- image halftone calibration control

Each control operates as necessary.

Environmental change control (HP Color LaserJet 5550 models)

This control calibrates each bias to obtain the best image possible according to environmental changes.

The environment conditions sensor detects the temperature and the humidity. The sensor sends this information to the DC controller in the form of the Temperature Detection signal (TEMSNS) and the Humidity Detection signal (HUMSNS).

The DC controller monitors the environmental conditions of the printer based on these two signals.

The DC controller controls the following biases to prevent image defects when it detects an environmental change.

- Developing bias
- Primary transfer bias
- Secondary transfer bias

If the environment sensor detects a temperature below -30ºC (-22ºF) or over 80ºC (176ºF), the DC controller determines this is an "environment sensor abnormality" and sends an error message to the formatter.

If the environment sensor detects a temperature below 7ºC (44.6ºF), the printer will not perform a calibration cycle.

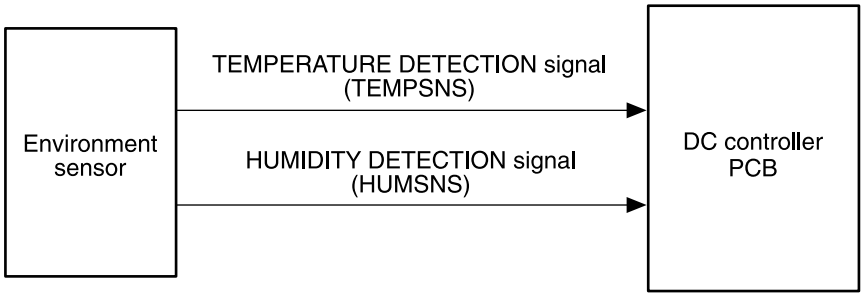

Image density calibration control (DMAX)

This control stabilizes image density by calibrating the values of the developing bias whenever one of the following events occurs:

- when the printer is turned on
- when a print cartridge is replaced
- after a set number of pages have printed
- when the formatter sends an operation command

Image density calibration consists of three steps:

1. The DC controller forms density patterns for each color on the ETB using varying levels of developing bias.
2. The color registration detection unit measures the image density of the density patterns formed on the ETB.
3. The DC controller uses the density measurements to adjust the developing bias to obtain proper image density.

Image halftone calibration control (DHALF)

This control measures halftone density output from the formatter and returns the measurements to the formatter so it can perform halftone calibration. Image density calibration must always be performed prior to image halftone calibration.

Image halftone calibration control consists of three steps:

1. Using the optimum developing bias determined during image density calibration, the DC controller forms density patterns on the photosensitive drum in each color cartridge.

2. These density patterns are transferred to the ETB, and the color registration detection unit measures the image density of these patterns. Image data is returned to the formatter.
3. The formatter uses the image data to perform a halftone calibration in order to obtain an ideal halftone image.

Image density detection

Each of the image stabilization controls described above uses the color registration unit at the top of the ETB unit to measure image density. To measure image density, the DC controller emits a light from sensors located above the density detection patterns on the ETB. The light reflected off the patterns is returned to the sensor, and the data is returned to the DC controller. Figure 5-31. Image density detection illustrates this process.

When the values detected by the density sensor are outside the specified range, the DC controller resets the image density and issues an "image density sensor out of guaranteed range" warning to the formatter.

If the sensor receives no reflected light, the DC controller stops the printer and issues a "density sensor abnormality" warning to the formatter.

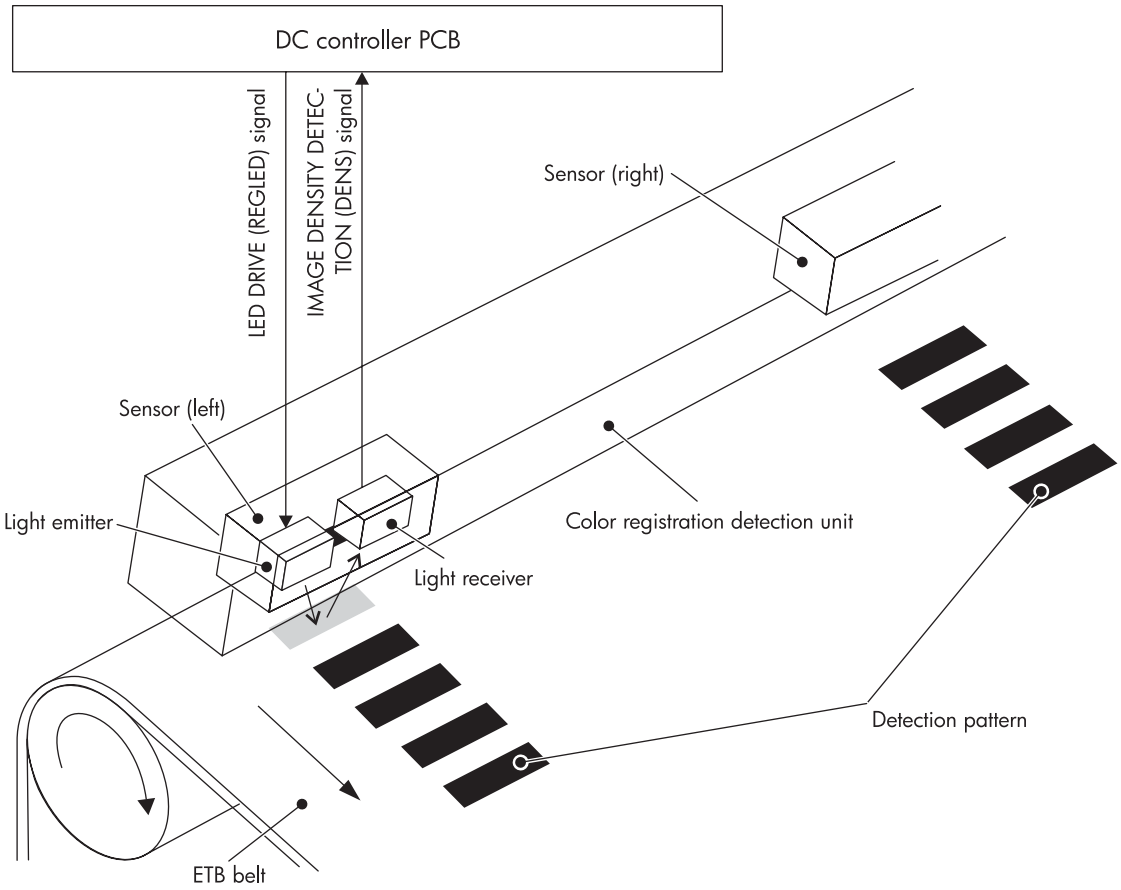

Figure 5-31. **Image density detection**

Pickup/feed system

The pickup/feed system picks paper from the input trays and carries it along the paper path. The printer has one multi-purpose tray (Tray 1) and one 500-sheet cassette (Tray 2).

- Tray 3 is standard on the HP Color LaserJet 5500dtn and 5550dtn models. Tray 3 and Tray 4 are standard on the HP Color LaserJet 5500hdn model. Trays 3, 4, and 5 are standard on the HP Color LaserJet 5550hdn model.
- Tray 3 and Tray 4 are optional on the HP Color LaserJet 5500, 5500n, and 5500dn models.
- Trays 3, 4, and 5 are optional on the HP Color LaserJet 5550 and 5550dn models.

Sensors detect the presence of paper in each of these trays. The paper length and width detection switches detect the size of the paper in each tray as well as the presence of each tray. There are several standard paper sizes the printer can detect. In addition, the printer can detect custom paper sizes. To use detectable custom paper sizes, the user must move a switch in the cassette from the "Standard" position to the "Custom" position. Once a custom size is set for a tray, that size will be retained until the switch is moved back to the Standard position. Figure 5-32. Custom/Standard paper size switch in cassette shows this switch.

Four motors, a clutch, and a solenoid drive the various feed rollers. Photo sensors are able to detect the progress of paper along the paper path. If paper does not reach or pass one of these sensors within a specified time, the DC controller determines there is a paper jam and notifies the formatter. Figure 5-33. Pickup/feed system on the next page illustrates this system.

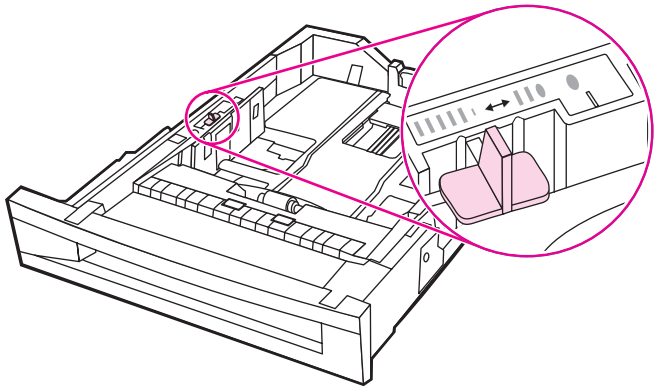

Figure 5-32. **Custom/Standard paper size switch in cassette**

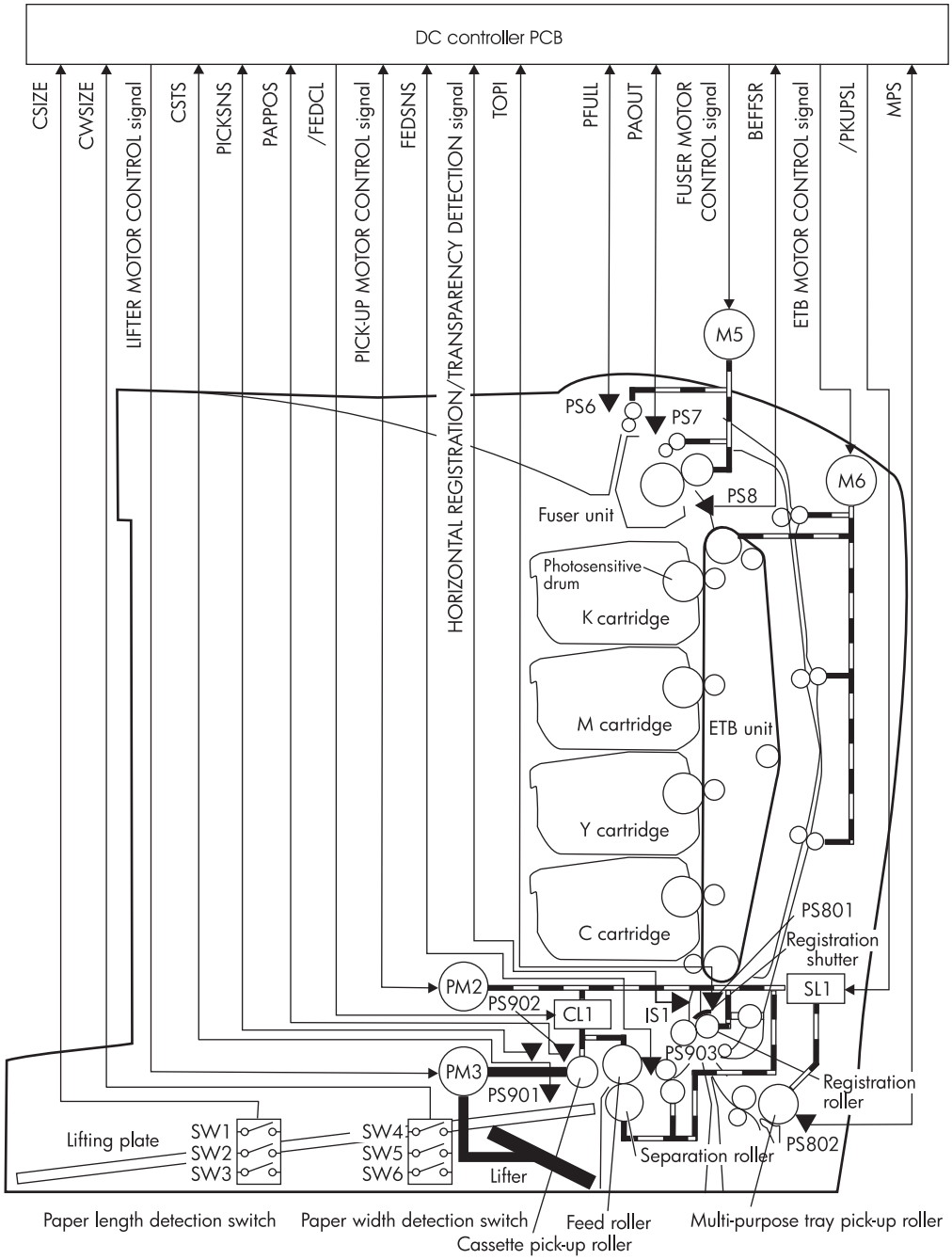

Figure 5-33. **Pickup/feed system**

The pickup/feed system has the following physical components:

- M5: fuser motor
- M6: ETB motor
- PM2: pickup motor
- PM3: lifter motor
- CL1: cassette pickup clutch
- SL1: multi-purpose tray pickup solenoid
- PS6: output bin full sensor

- PS7: fuser delivery paper sensor
- PS8: fuser inlet paper sensor
- PS9: pickup sensor
- IS1: horizontal registration/transparency sensor (light receiver)
- PS801: top of page sensor
- PS802: multi-purpose tray paper sensor
- PS901: cassette paper sensor
- PS902: paper stack surface sensor
- PS903: paper feed sensor
- SW1, SW2, SW3: paper length detection switches
- SW4, SW5, SW6: paper width detection switches

Figure 5-34. Pickup/feed system illustrates the pickup/feed system, which can be divided into three units:

- **pickup/feed unit**. from the point the paper is picked from the tray until it reaches the fuser
- **fuser/delivery unit**. from the fuser to the output bin
- **duplex feed unit**. from the output bin to the registration shutter at the bottom of the ETB

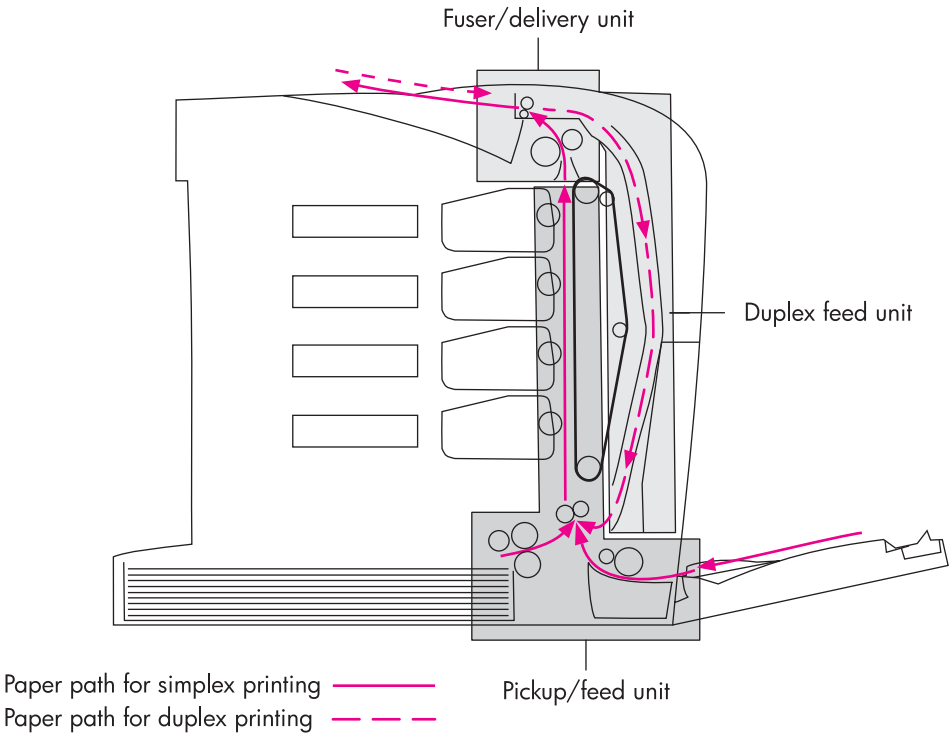

Figure 5-34. Pickup/feed system

Pickup/feed unit

At the bottom of the paper path, the pickup unit picks individual pieces of paper from the trays. Then the ETB carries the paper to the top of the paper path and into the fuser. The mechanisms of the pickup/feed unit are as follows:

- cassette pickup
- multi-purpose tray pickup
- paper feed
- duplex re-feed and horizonal registration

Cassette paper pickup

The printer feeds paper from Tray 2 using the following method. Figure 5-35. Cassette pickup operation illustrates this procedure.

1. When the DC controller receives a print command from the formatter, it rotates the pickup motor (PM2) clockwise, causing the registration roller and the feed roller to rotate.
2. When the scanner motor is ready, the DC controller turns on the cassette pickup clutch (CL1), allowing the pickup roller, feed roller, and separation roller to rotate. At the same time, the DC controller rotates PM3 clockwise, causing the pickup arm to lower onto the surface of the paper stack. PM3 stops rotating after the pickup sensor detects the pickup arm.
3. As the pickup arm lowers, the pickup roller touches the surface of the stack of paper and pulls paper out of the cassette.
4. When paper reaches the paper feed sensor, the DC controller rotates PM3 counter-clockwise to lift the pickup arm.
5. If multiple sheets are fed, the separation roller rotates in the opposite direction of the feed roller, holding back any multiple-fed sheets and allowing a single sheet to pass to the registration roller.
6. The registration shutter aligns the paper, and the paper is fed into the paper path at the correct speed for the media type.

7. The ETB carries the paper past the print cartridges, where toner is transferred onto the paper, and into the fuser.

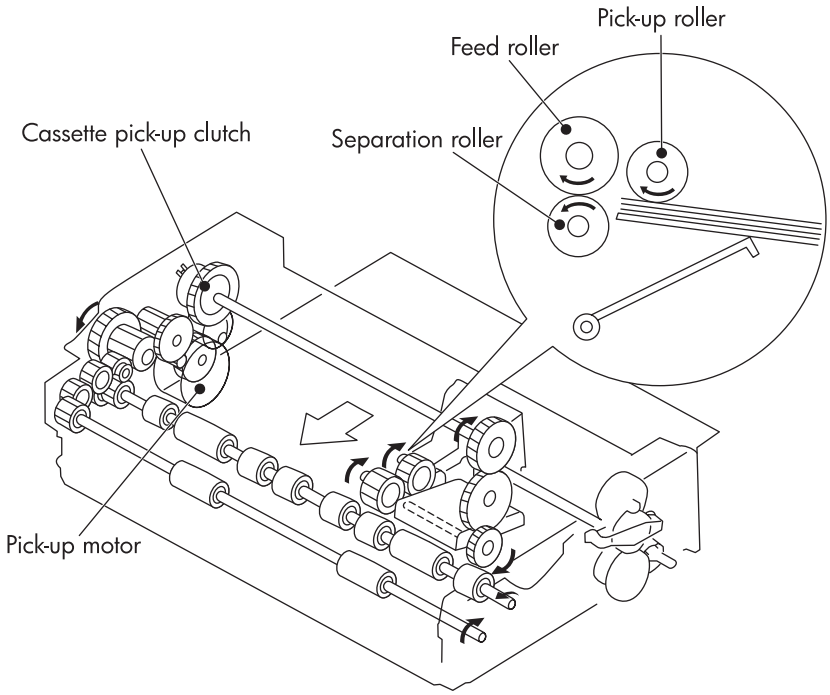

Figure 5-35. **Cassette pickup operation**

Cassette detection and cassette paper size detection

The printer can sense whether the cassette (Tray 2) is installed correctly, and it can sense the size of the paper in the cassette. Paper size detection switches along the side of the cassette send this information to the DC controller. The DC controller is able to determine which size is loaded by reading the state of the various switches according to the Table 5-5. Cassette paper size detection/cassette detection.

Table 5-5. Cassette paper size detection/cassette detection

Paper size	Paper length detection switch			Paper width detection switch		
	SW1	SW2	SW3	SW4	SW5	SW6
A3	on	off	on	on	off	na
A4 landscape	off	off	on	on	off	na
A4 portrait	on	off	off	off	off	na
Ledger (11 x 17 inches)	on	off	on	on	on	na
Letter landscape	off	off	on	on	on	na
Letter portrait	on	on	off	off	off	na

Table 5-5. Cassette paper size detection/cassette detection (continued)

Paper size	Paper length detection switch			Paper width detection switch		
B4	on	off	on	off	on	na
B5 portrait	off	on	on	off	off	na
Legal	on	off	on	off	off	na
Executive	off	on	off	off	off	na
A5 portrait	off	off	on	off	off	na
Custom	on	on	on	na	na	na
No cassette	off	off	off	off	off	off

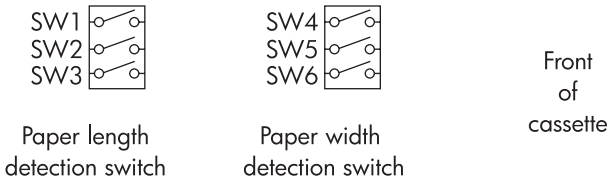

Figure 5-36. **Paper size detection switches**

Although the cassette determines paper size by reading the switches, it is possible that the user can select a different size than what is loaded, creating an error in paper size detection. The Custom/Standard paper size switch in the cassette overrides the size detection switches when it is in the Custom position.

The paper leading edge sensor detects when the leading edge and the trailing edge of a sheet of paper pass it. By measuring the time between the leading edge and trailing edge passing, the sensor can determine the actual size of the paper. If this measured size differs from the size specified by the formatter or the switch combination, the DC controller determines there is a mis-match. The current sheet of paper is ejected from the printer, and the printer stops.

Paper lifting

The printer is able to keep the stack of paper at a specified height at all times in order to maintain uninterrupted paper feeding. The printer adjusts the stack height whenever the printer is turned on, whenever the cassette is pushed into position, or as needed during a print operation. Figure 5-37. Paper lifting operation illustrates the components of the cassette paper lifting operation.

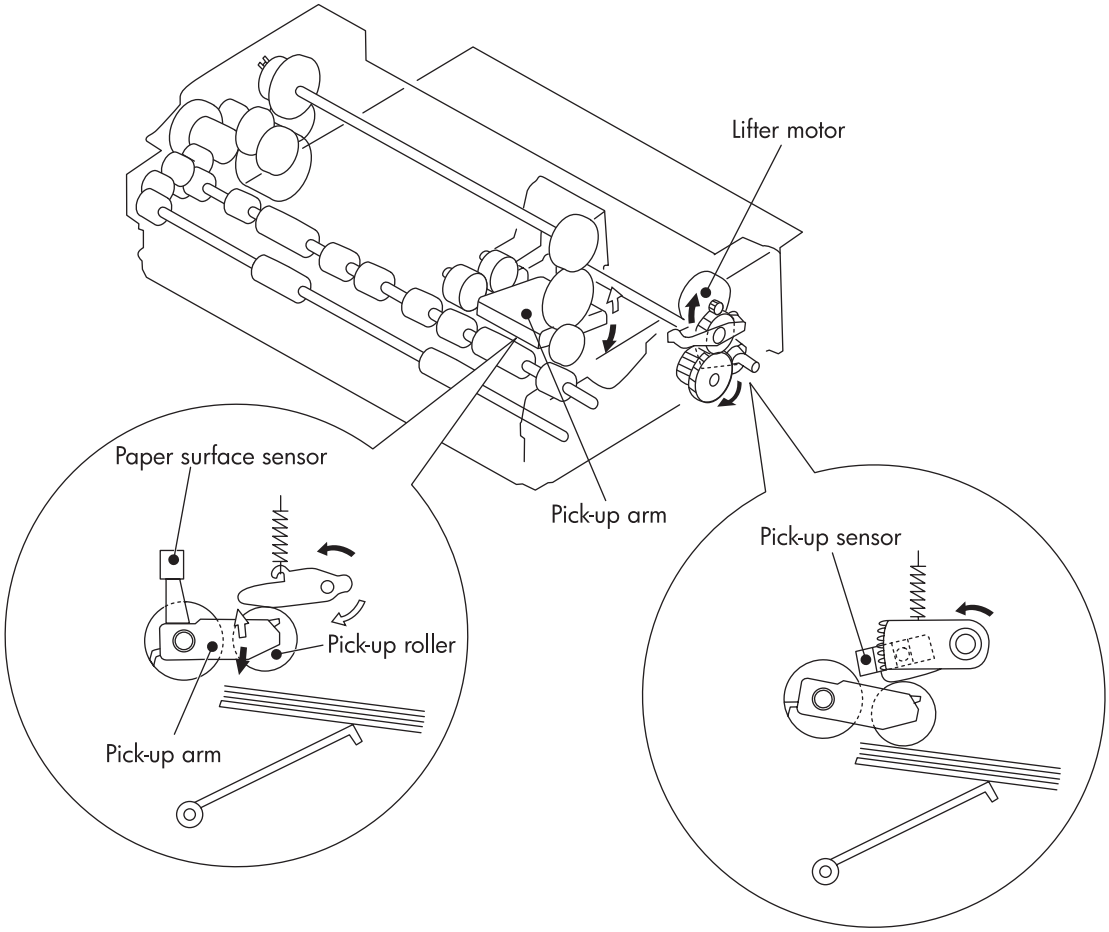

Figure 5-37. Paper lifting operation

Multiple-feed prevention

The separation roller prevents multiple sheets of paper from entering the paper path. If the pickup roller picks only one sheet of paper, a clutch in the separation roller allows the paper to feed by rotating in the same direction. However, if the pickup roller picks multiple sheets, the separation roller rotates in the opposite direction from the feed roller, pushing the extra sheets back into the cassette. Only the top sheet of paper is fed into the printer. Figure 5-38. Multiple-feed prevention illustrates this procedure.

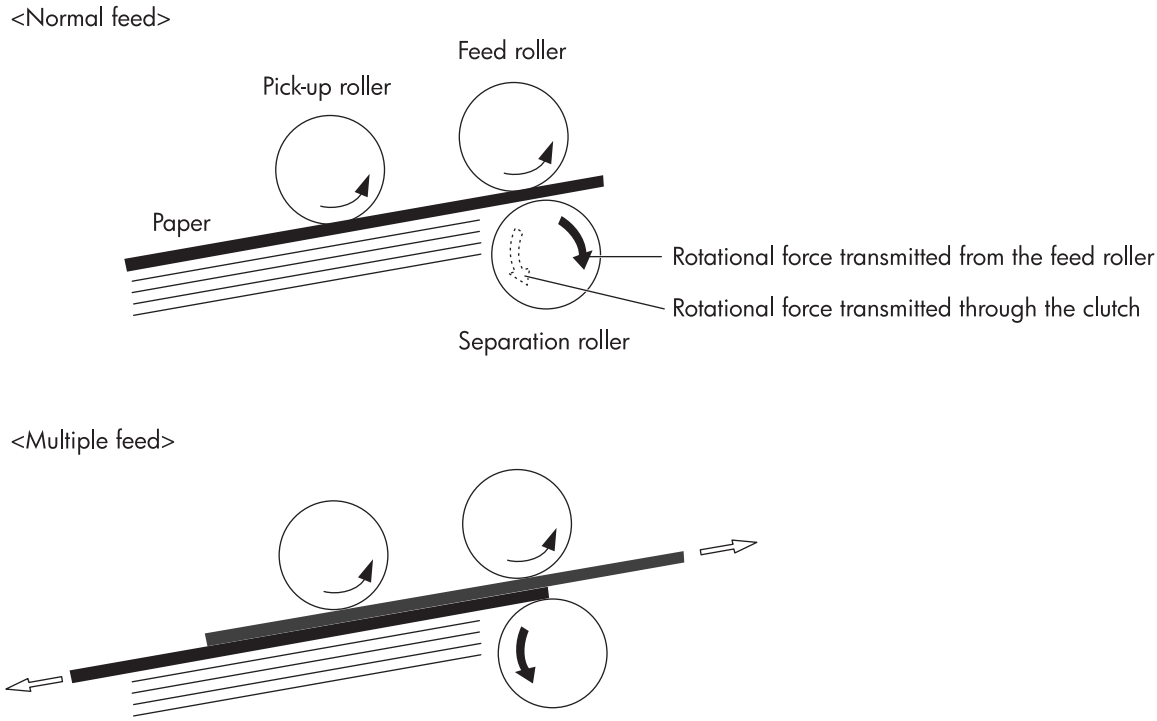

Figure 5-38. **Multiple-feed prevention**

Overhead transparency detection

In order to prevent print quality problems, the printer prints on overhead transparencies (OHT) at a slower speed than on plain paper. The printer has a horizontal registration/ transparency sensor in the pickup unit that detects an OHT and signals the DC controller to slow the motors accordingly. (This sensor also detects the side-to-side alignment of paper, which is useful for duplex printing.)

The horizontal registration/transparency sensor uses a light transmitter and receiver to detect the presence of plain paper. When plain paper passes through the sensor, the light is blocked, and the OHT signal changes from low to high. Consequently, when the signal is not blocked, but paper is detected by the paper leading edge sensor, the DC controller determines the media to be an OHT and adjusts the feed speed accordingly. Figure 5-39. Overhead transparency detection illustrates this process.

NOTE Avoid using transparencies that have a paper strip along the edge. The sensor identifies this type of transparency to be paper and operates incorrectly. HP Color LaserJet transparencies do not have a paper strip along the edge. See Chapter 8 for ordering information.

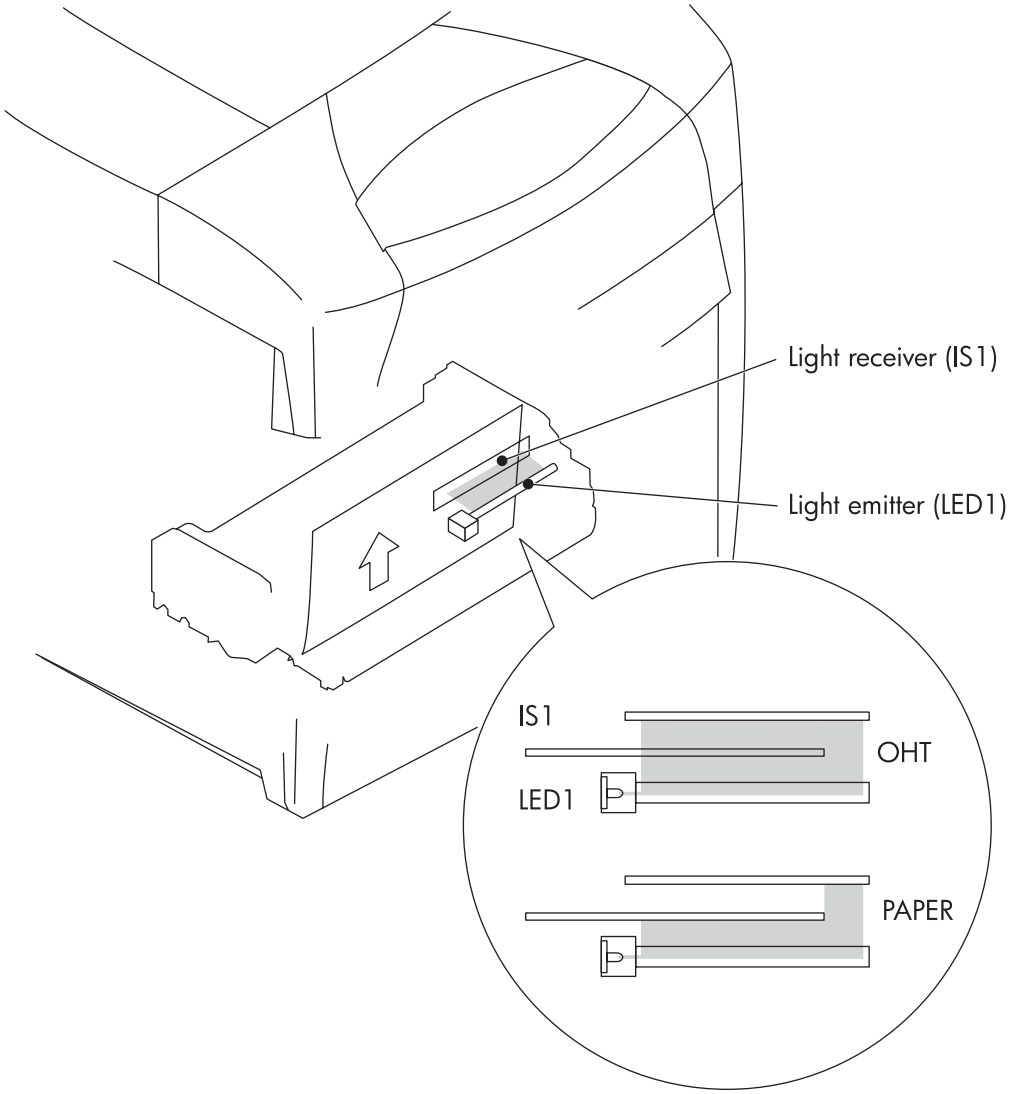

Figure 5-39. **Overhead transparency detection**

Horizontal registration adjustment

The printer adjusts the image on each page from side to side so the image is placed correctly on the page. This adjustment is especially important during duplex printing to align the image on the front of the page with the image on the back.

To adjust horizontal registration, the printer uses the horizontal registration/transparency sensor. When a sheet of paper passes through the sensor, the DC controller detects the position of the left edge of the sheet and passes this measurement to the formatter. The formatter adjusts the starting position in the horizontal scanning direction accordingly, and then sends a message to the DC controller to begin printing. Figure 5-40. Horizontal registration adjustment illustrates this procedure.

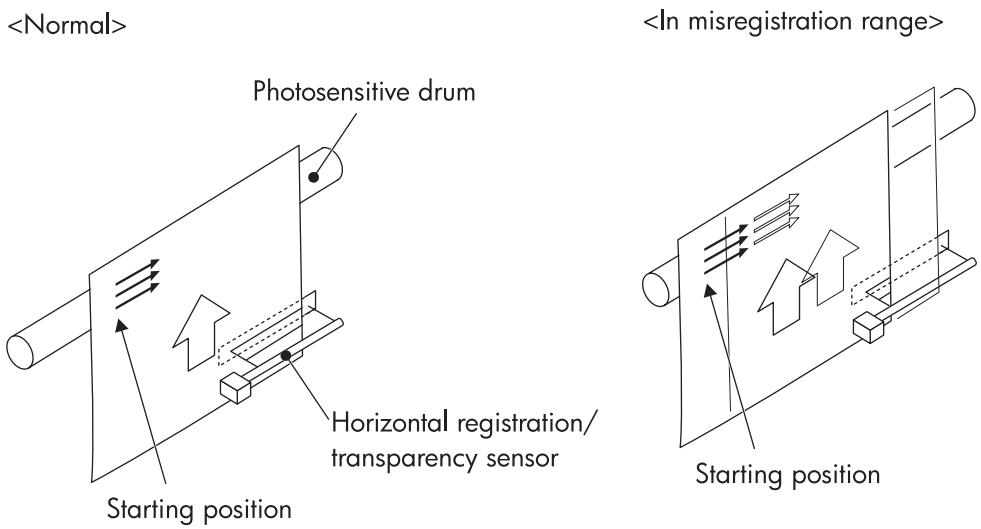

Figure 5-40. Horizontal registration adjustment

Feed speed control

The type of media in the paper path dictates the speed at which it is fed. Table 5-6. Feed speed according to media shows the relationship between media type and feed speed.

Table 5-6. Feed speed according to media

Feed mode	Media type	Print mode	Feed speed
Normal mode	Plain paper	Full color	normal
		Monochrome	
OHT mode	Overhead transparency	Full color	1/4 speed
		Monochrome	1/2 speed
Thick 1 mode	Thick paper	Full color	1/2 speed
		Monochrome	
Thick 2 mode	Thick paper	Full color	1/2 speed (5500 models only) 1/3 speed (5550 models only)
		Monochrome	
Gloss 1 mode	Glossy paper	Full color	1/3 speed
		Monochrome	

Table 5-6. Feed speed according to media (continued)

Feed mode	Media type	Print mode	Feed speed
Gloss 2 mode	Glossy paper	Full color	1/3 speed
		Monochrome	1/2 speed (5550 models only)
Image mode (high glossy mode; (5550)	Glossy paper	Full color	1/4 speed
		Monochrome	
Gloss film mode	Glossy film	Full color	1/3 speed (5500 models only)
		Monochrome	1/4 speed (5550 models only)
Envelope mode	Envelope	Full color	normal
		Monochrome	
Thick paper mode	Thick paper	Full color	normal
		Monochrome	
Label paper mode	Adhesive labels	Full color	1/2 and 1/3 speed (5550 models only)
		Monochrome	1/3 speed (5550 models only)
Auto mode	• Plain paper • OHT	Full color	Automatically adjusts for media
		Monochrome	

The DC controller determines a media mismatch, ejects the media, and stops the printer in the following situations:

- OHT is detected and the printer is set to either thick paper or gloss mode.
- Plain paper is detected and the printer is set to OHT mode.

However, if the printer is set to plain-paper mode and OHT is detected, the DC controller will automatically switch the printer to OHT mode, and printing continues normally.

Fuser/delivery unit

The fuser/delivery unit consists of the fuser, which melts the toner and presses it onto the paper, and the delivery unit, which feeds the paper into the output bin. The sequence of events is as follows:

1. The ETB carries a sheet of paper with transferred toner into the fuser.
2. The fuser motor adjusts its speed to maintain even tension on the paper as it enters the fuser.
3. The fuser melts the individual toner particles. The fuser sleeve and pressure roller mix the liquefied toner and press it onto the paper to create the desired color.
4. The paper passes from the fuser into the output bin.
5. For duplex jobs, the fuser reverses the paper direction and delivers the paper to the duplex feed unit.

A sensor in the output bin detects when the bin is full. If this is the case, the DC controller will stop the printer after the current print is completed.

Duplex feed unit

During 2-sided (duplex) printing, the duplex feed unit reverses the paper direction in the fuser and sends it back through the pickup/feed unit to print on the second side. Figure 5-41. Duplex switch back illustrates this duplex "switch back" procedure. The sequence of events is as follows:

1. The paper, with the front side printed, passes through the fuser.
2. The fuser motor (M5) rotates counterclockwise for a specified length of time after the paper reaches the fuser delivery sensor. The fuser delivery roller reverses direction and feeds the paper into the duplex feed unit.
3. The duplex feed roller feeds the paper back into the pickup unit, and the registration shutter detects and corrects any skew.
4. The horizontal registration/transparency sensor detects the left edge of the page, and aligns the page properly for duplex printing.
5. The paper then re-enters the feed unit and is printed on the second side.
6. The paper passes through the fuser a second time and comes to rest in the output bin.

NOTE During duplex printing, the printer prints the second side of the page first. For instance, if a 4-page print job is to be printed on two sheets of paper, pages 2 and 4 print first, then pages 1 and 3 print. For this reason, when duplex printing on pre-printed letterhead, be sure to load the letterhead face-down and with the top of the page to the left in Tray 2, Tray 3, Tray 4, Tray 5 for the HP Color LaserJet 5550 models only. In Tray 1, load letterhead face-up with the top of the page to the left.

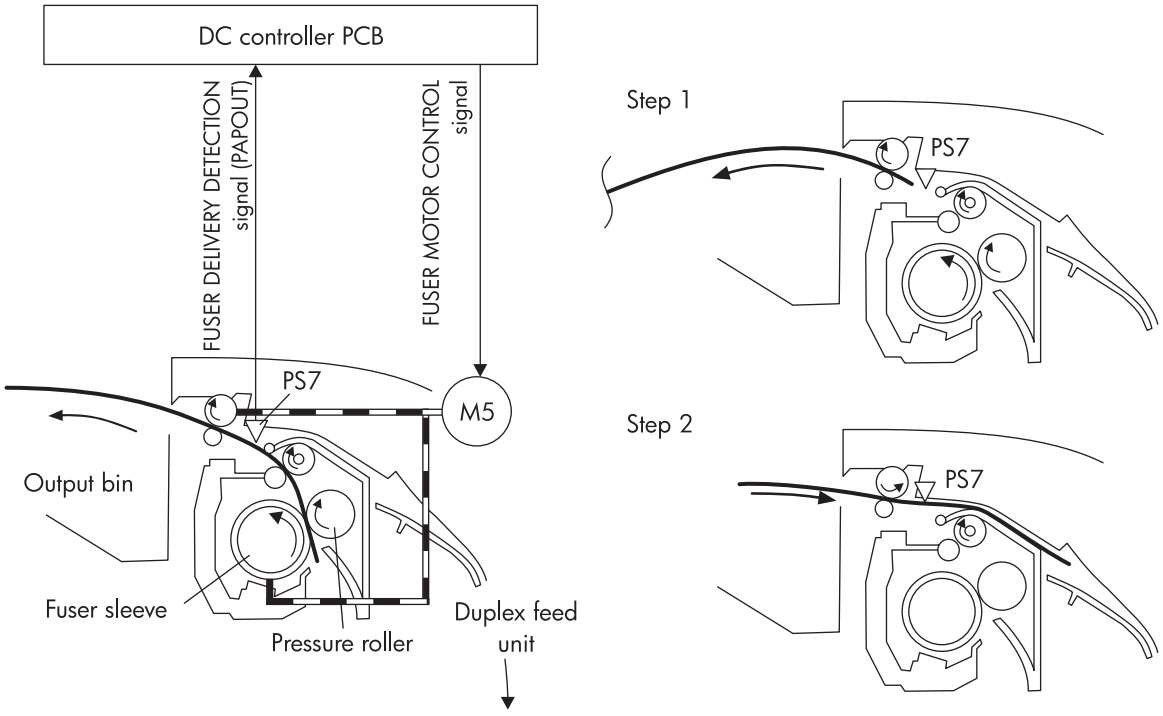

Figure 5-41. Duplex switch back

500-sheet paper feeder

The HP Color LaserJet 5500dtn and HP Color LaserJet 5550dtn printers are equipped with an additional 500-sheet paper feeder. The HP Color LaserJet 5500hdn is equipped with two additional 500-sheet paper feeders, and the HP Color LaserJet 5550hdn is equipped with three additional 500-sheet paper feeders. The 500-sheet paper feeder is optional on the HP Color LaserJet 5500, 5500n, 5500dn, and the HP Color LaserJet 5550, 5550n, and 5550dn. With the HP Color LaserJet 5500 models, the maximum optional 500-sheet paper feeders that can be installed is two. (Tray 3 and Tray 4). With the HP Color LaserJet 5550 models, the maximum optional 500-sheet paper feeders that can be installed is three (Tray 3, Tray 4, and Tray 5). These optional 500-sheet paper feeders operate the same as Tray 2. Figure 5-42. Additional 500-sheet paper feeder shows the paper path with one additional 500-sheet paper feeder (Tray 3) installed. It feeds through Tray 3 first, and then into the printer. The same would be true if a third optional 500-sheet paper feeder (Tray 5 for HP Color LaserJet 5550 models only) is installed. The paper would feed through Tray 4, Tray 3, and into the printer.

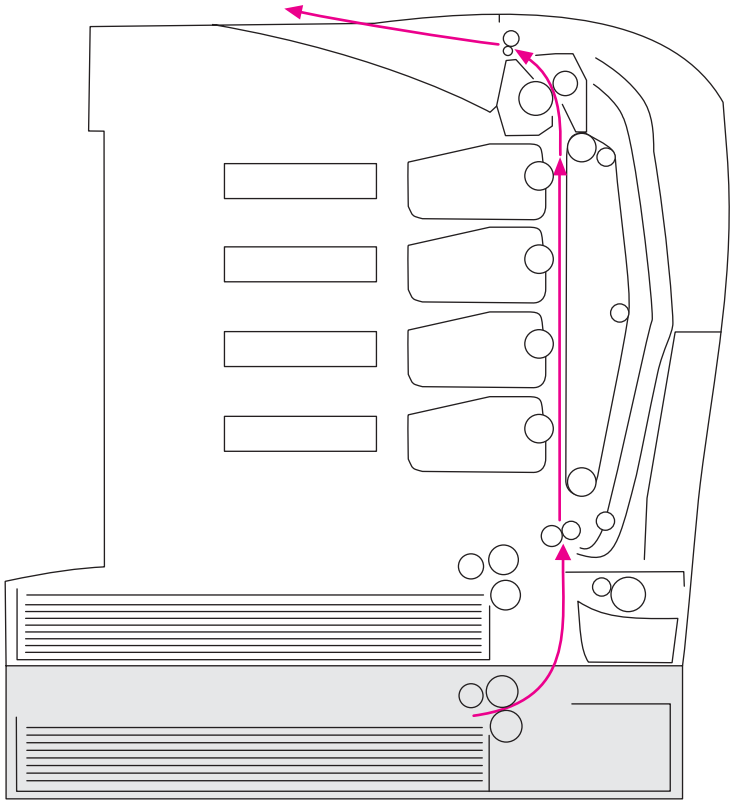

Figure 5-42. **Additional 500-sheet paper feeder**

Pickup and feed operations

The sequence of operations for the 500-sheet paper feeder follows. Figure 5-43. 500-sheet paper feeder pickup and feed operation illustrates this sequence.

1. The DC controller receives a print command from the formatter and sends a pickup command to the paper feeder driver.
2. The paper feeder driver rotates the pickup motor (M502) in the paper feeder, and the feed roller starts to rotate.

3. After the printer enters the SCANNER READY state, the DC controller instructs the paper feeder driver to pick a sheet of paper. The paper feeder PCB activates the paper feeder pickup clutch (CL501). Then the pickup roller, feed roller, and separation roller make one rotation. The lifter motor (M501) rotates clockwise, causing the pickup arm to move down.
4. As the pickup arm moves down, the pickup roller touches the surface of the stack of paper. Paper is picked from the stack and fed into the printer.
5. When paper reaches the feed sensor, the pickup motor rotates counter-clockwise, causing the pickup arm to lift.
6. The separation roller eliminates any multiple-fed sheets, and a single piece of paper enters the feed path.

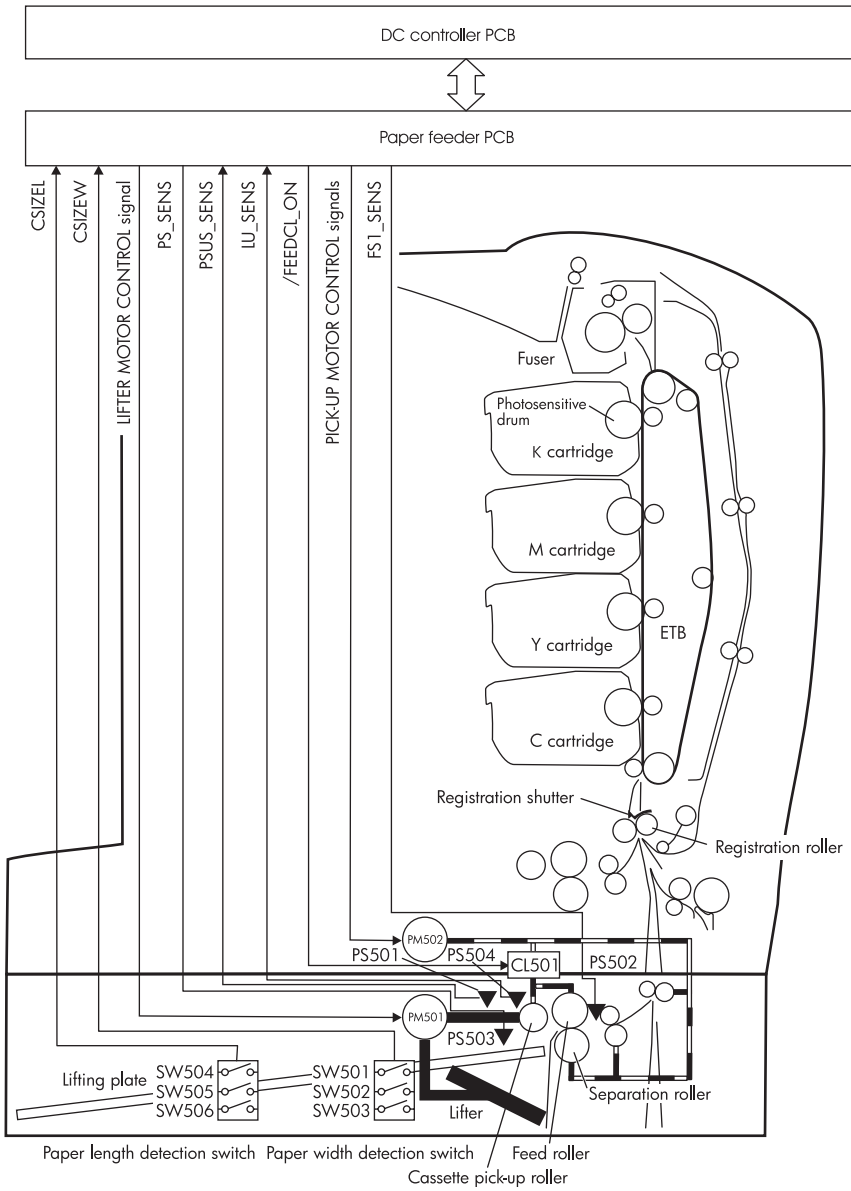

Figure 5-43. **500-sheet paper feeder pickup and feed operation**

6 Removal and replacement

NOTE Use this information in conjunction with the English service manual. The English service manual contains additional information that is not included in this translation.

This chapter includes information about removing and replacing printer parts and components.

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Introduction

This chapter contains illustrations and step-by-step instructions to remove and replace printer parts and components.

Removal and replacement strategy

This chapter explains how to remove and replace major printer components. (HP does not support repairing individual subassemblies or troubleshooting to the component level.)

Replacement is generally the reverse of removal. Occasionally, directions for difficult or critical replacement procedures are included.

Designations for the left and right sides of the printer are as if you are facing the front of the printer.

WARNING! The information in this section is intended for authorized service personnel only.

Repair notices

WARNING! Turn the printer off, then unplug the power cord before servicing the printer. Failure to completely disconnect the printer could result in severe injury.

Never operate or service the printer with the protective cover removed from the laser/scanner assembly. The reflected beam, although invisible, can damage your eyes.

Never operate the printer with any parts removed.

The sheet-metal parts can have sharp edges. Be careful not to cut yourself when handling sheet-metal parts.

Caution regarding electrostatic discharge (ESD)

The printer contains parts that are sensitive to electrostatic discharge (ESD). Watch for the ESD reminder shown at the left when removing printer parts. Protect the parts that are sensitive to ESD with protective ESD pouches.

Required tools

Before servicing the printer, gather the following tools:

- Phillips #2 magnetized screwdriver (152-mm [6-inch] shaft)
- Small flat-blade screwdriver
- Small needle-nose pliers
- ESD strap
- Penlight (optional)

All components in the HP Color LaserJet 5500 series printer use Phillips-head screws that require a #2 Phillips screwdriver. Ensure that you have a Phillips screwdriver and not a Posidriv screwdriver. Figure 6-1. Phillips and Posidriv screwdriver comparison (below) shows the difference between a Phillips and a Posidriv screwdriver. Note that the Phillips tip has more beveled surfaces.

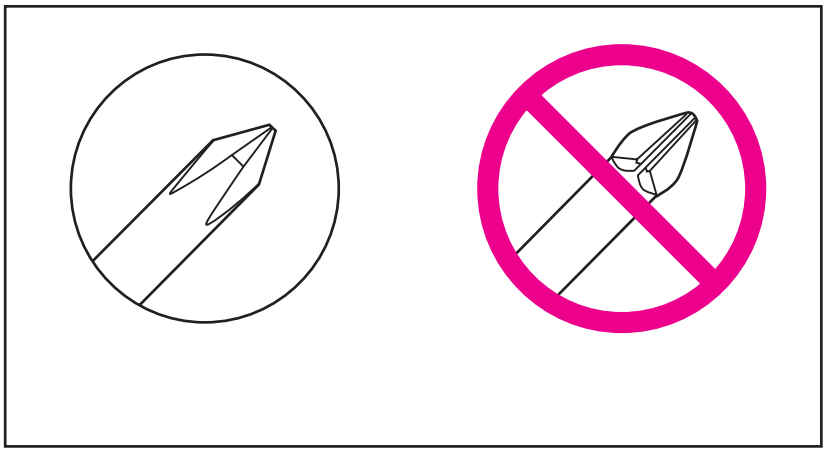


Figure 6-1. **Phillips and Posidriv screwdriver comparison**

Types of screws

Table 6-1. Types of screws describes the screws used in the printer and provides guidelines to help determine where to use each type of screw. The screws can vary in length depending on the thickness of the material being fastened.

Always note where each type of screw is located and replace each one into its original location.

Table 6-1. Types of screws

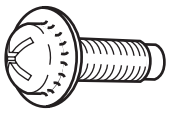
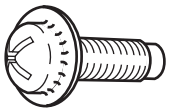
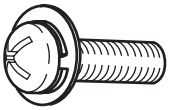
Illustration	Description	Uses
	Screw, truss head M3x8 part number XA9-1330-000CN	To hold sheet metal to sheet metal.
	Screw, self tapping	To hold plastic to plastic.
	Screw, truss head M3x6 part number XA9-1329-000CN	To hold sheet metal to sheet metal. example: formatter cage
	Screw, machine with washer M3x10 part number XA9-1162-000CN	To hold plastic to metal. example: printer covers

Table 6-1. Types of screws (continued)

Illustration	Description	Uses
	Retaining ring (e-type)	To hold a bolt through a slot or a gear in place.

Supplies

The customer replaces print cartridges, the fuser, and the ETB unit as they are depleted. Printer Maintenance explains when to replace supplies and provides instructions on replacing them.

NOTE The printer tracks the amount of use on the customer-replaceable supplies by keeping a page count. Swapping supplies between printers might cause a misrepresentation of supply life values and is not recommended.

NOTE If you replace either the fuser or the ETB when servicing the printer, and these supplies have not yet reached the end of their estimated life, you must reset the page count for these supplies through the Configure device menu on the control panel. See Replacing the fuser for instructions on resetting the ETB and fuser counts.

Table 6-2. Approximate replacement intervals for supply items

Supply item	Printer message	Page counts	Approximate time period[1]	To install
Black (K) print cartridge	**REPLACE BLACK CARTRIDGE**	13,000 pages[2]	3.25 months	See Changing print cartridges.
Cyan (C) print cartridge	**REPLACE CYAN CARTRIDGE**	12,000 pages[2]	3.0 months	See Changing print cartridges.
Magenta (M) print cartridge	**REPLACE MAGENTA CARTRIDGE**	12,000 pages[2]	3.0 months	See Changing print cartridges.
Yellow (Y) print cartridge	**REPLACE YELLOW CARTRIDGE**	12,000 pages[2]	3.0 months	See Changing print cartridges.
Image transfer kit (ETB)	**REPLACE TRANSFER KIT**	120,000 pages[3]	40 months	See Replacing the transfer unit (ETB).
Image fuser kit	**REPLACE FUSER KIT**	150,000 pages	50 months	See Replacing the fuser.

[1]Approximate lives are based on 3,000 pages per month.
[2]The approximate average A4/Letter-size page count is based on 5% coverage of individual colors. Page counts are only estimations; usage conditions and print patterns cause results to vary.
[3]Page counts are only estimations; usage conditions and print patterns cause results to vary.

CAUTION Hewlett-Packard recommends the use of HP products in this printer. Use of non-HP products can cause problems that require service not covered by the Hewlett-Packard warranty or service agreements.

Print cartridges and ETB

It is recommended that you remove the print cartridges and ETB when servicing internal printer components. Place the print cartridges and ETB in a safe place while they are out of the printer.

Use a screwdriver to rotate the ETB supports (callout 1) and the ETB pressure gears (callout 2) up and into the printer. This allows the front cover to close completely, so you can remove other components.

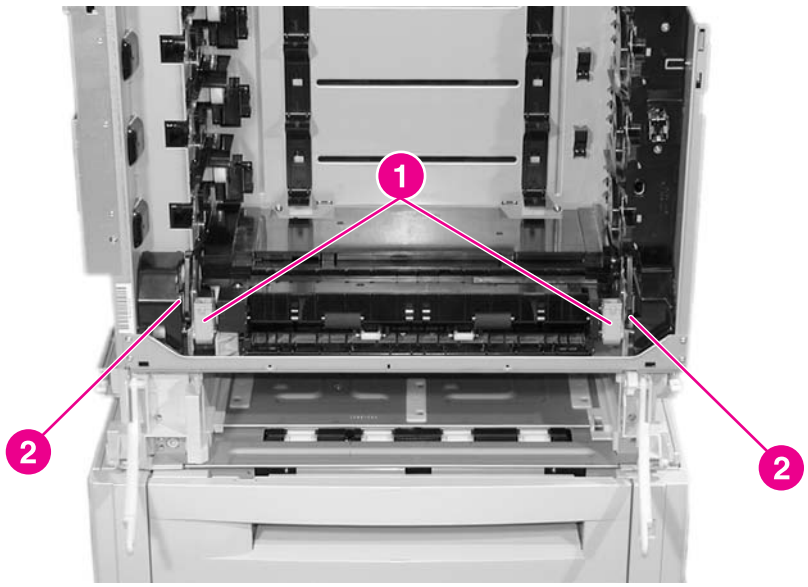


Figure 6-2. **ETB supports and pressure gears**

CAUTION Grasp the print cartridges by the blue handles to avoid accidentally touching the photosensitive drum inside each cartridge.

CAUTION Do not place any items on the ETB. If the belt is punctured or otherwise damaged, print quality problems will result.

For instructions on removing the print cartridges, see Changing print cartridges.

For instructions on removing the ETB, see Replacing the transfer unit (ETB).

Covers and external components

This section contains instruction for removing and replacing printer covers and external components.

Rear cover

Use the following steps to remove the rear cover of the printer.

To remove the rear cover

1. Remove the two screws shown in callout 1.
2. Pull out slightly on the bottom of the rear cover, and slide it toward the right side of the printer to remove it.

Figure 6-3. **Removing and replacing the rear cover**

Top cover

Use the following steps to remove the top cover of the printer.

To remove the top cover

1. Lift the top cover and remove the fuser. See Replacing the fuser for instructions on removing the fuser.

WARNING! The fuser might be hot. Wait 10 minutes for it to cool down before removing it.

2. Using fingers or needle-nose pliers, pinch and release the white plastic clips (shown in callout 1) on the damper arm on the left side of the cover. It is easier to pinch these clips if you tip the top cover forward.
3. Remove the screw shown in callout 2 and remove the retaining block.

4. Pull the cover to the right to release the hinge pin on the left side.

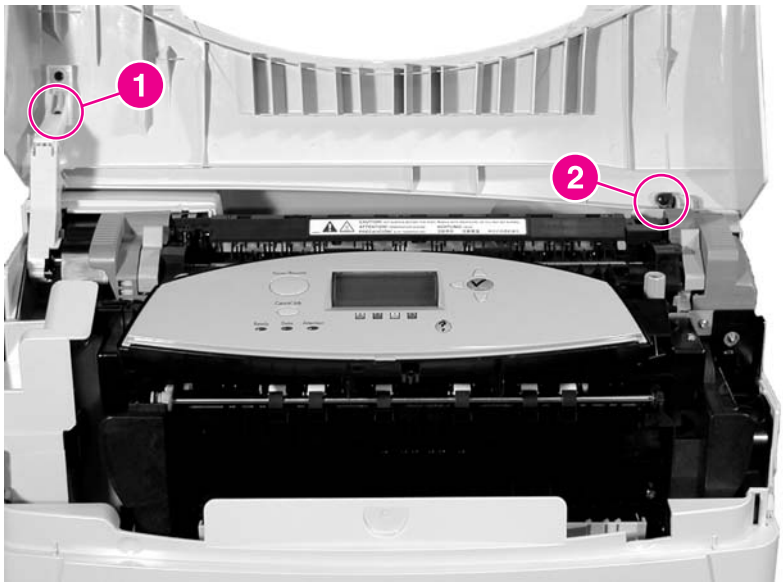


Figure 6-4. **Removing and replacing the top cover**

Rear top cover

Use the following steps to remove the rear top cover.

To remove the rear top cover

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the two screws shown in callout 1.
4. Insert a flat-blade screwdriver between the top and side covers on the left side of the printer. Lift slightly to disengage the tab (shown in callout 2) on the left side of the printer.

5. Pull the cover up and back to remove it.

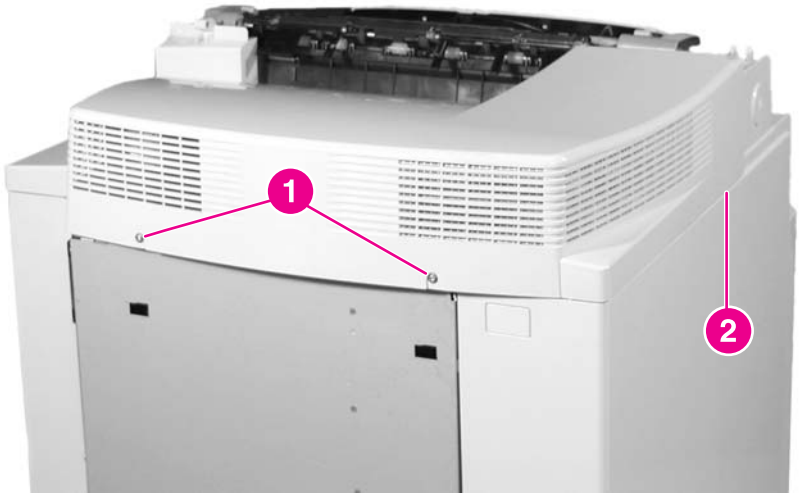


Figure 6-5. **Removing and replacing the rear top cover**

Left cover

Use the following steps to remove and replace the left cover.

To remove the left cover

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Open the front cover.
5. Remove the two screws at the bottom of the left cover shown in callout 1.
6. Disengage the two tabs shown in callout 2.
7. Tilt the top of the left cover away from the printer, and remove it.

Reinstallation tip

When reinstalling the left cover, be sure to insert the two hooks that are along the bottom edge of the cover into the holes in the printer frame.

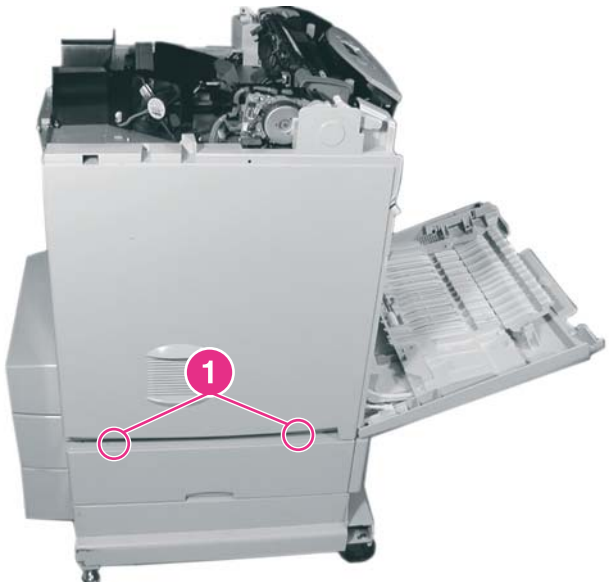


Figure 6-6. **Removing and replacing the left cover (1 of 2)**

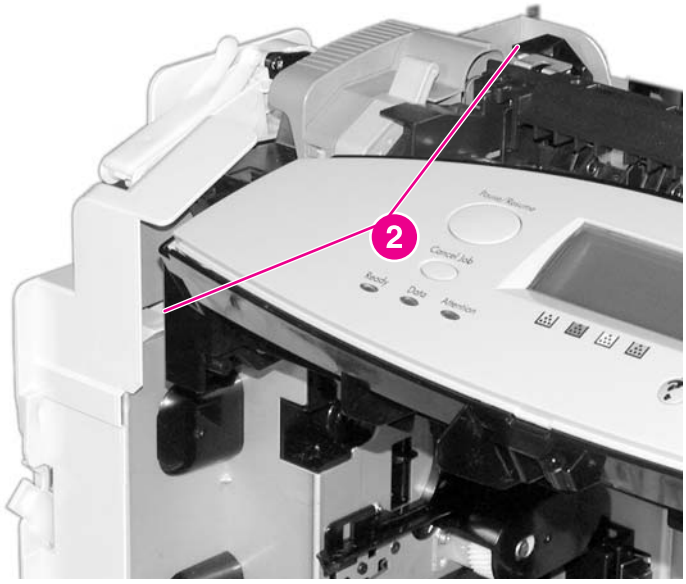


Figure 6-7. **Removing and replacing the left cover (2 of 2)**

Right cover

Use the following steps to remove and replace the right cover.

To remove the right cover

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Open the front cover.
5. Remove the two screws shown in callout 1.
6. Disengage the four tabs shown in callout 2.
7. Tilt the top of the right cover away from the printer and remove it.

Reinstallation tip

When reinstalling the right cover, be sure to insert the two hooks that are along the bottom edge of the cover into the holes in the printer frame.

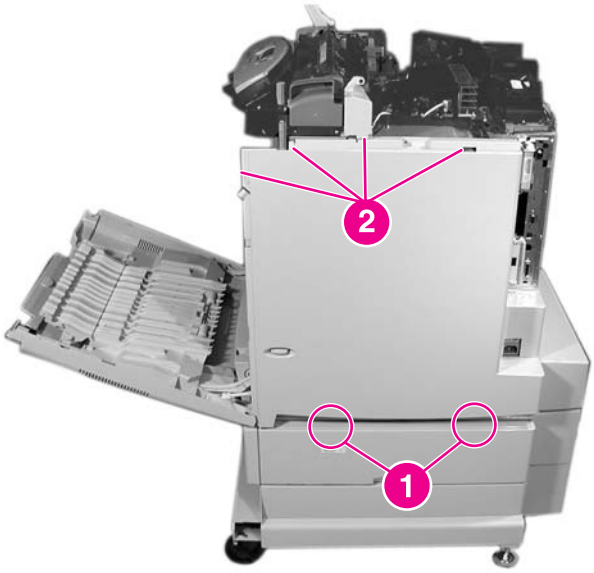


Figure 6-8. **Removing and replacing the right cover**

Multi-purpose tray (Tray 1)

Use the following steps to remove the multi-purpose tray (Tray 1).

To remove the multi-purpose tray

1. Remove Tray 2 from the printer and set it aside.

NOTE If the tray is difficult to remove because the front cover will not close completely, make sure the ETB supports are rotated up into the printer. See Figure 6-2. ETB supports and pressure gears.

2. Open the multi-purpose tray (Tray 1).
3. Unhook the two link arms shown in callout 1.

4. Flex the cover inward near the two link arms, and remove the cover.

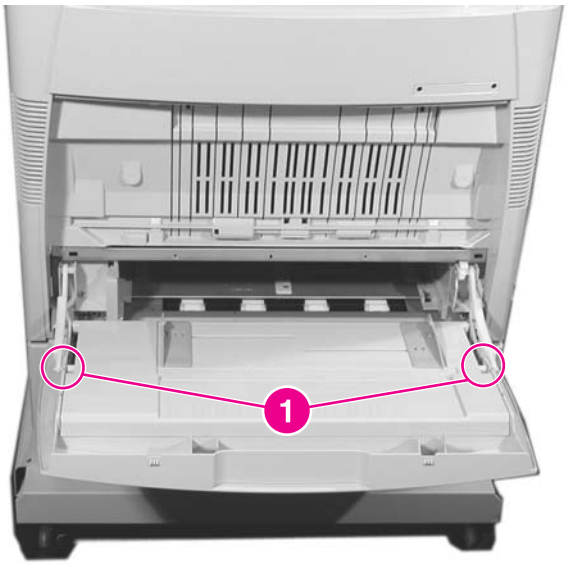


Figure 6-9. **Removing and replacing the multi-purpose tray**

Front cover

Use the following steps to remove the front cover.

To remove the front cover

1. Remove the multi-purpose tray. See Multi-purpose tray (Tray 1).
2. Unhook the two spring rods shown in callout 1.

CAUTION The rods are under spring tension. Use caution when removing them. Tilt the tray up to lessen the spring tension, making the rods easier to remove.

3. Remove the four screws shown in callout 2, and remove the rod supporting plates.

4. Remove the front cover.

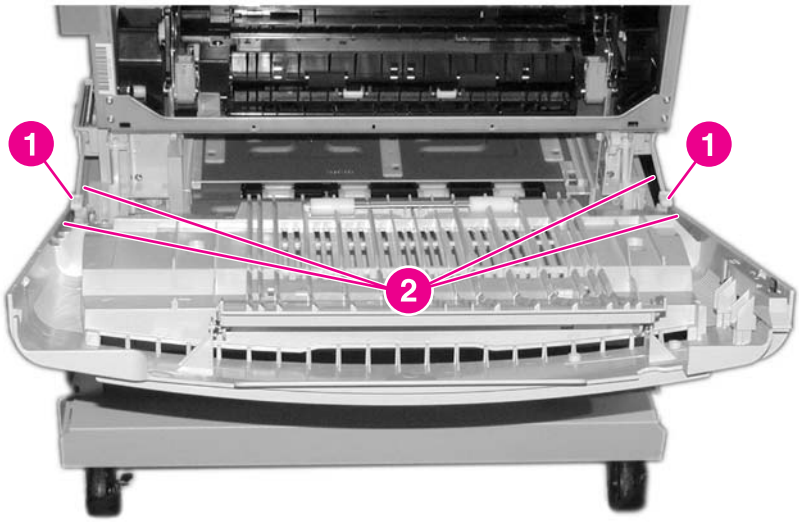


Figure 6-10. **Removing and replacing the front cover**

Control panel

Use the following steps to remove the control panel and install a control panel overlay.

To remove the control panel

1. Remove the top cover. See Top cover.
2. Remove the rear top cover. See Rear top cover.
3. Remove the right cover. See page Right cover.
4. Remove the two screws shown in callout 1.
5. Lift the right side of the control panel to access the connector underneath the left side.
6. Disconnect the connector shown in callout 2, and unwind the wires from the stay.

7. Remove the control panel.

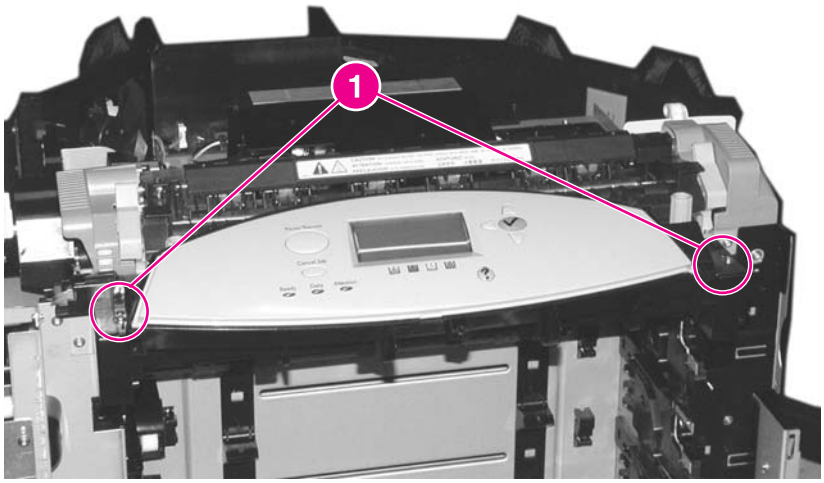


Figure 6-11. **Removing and replacing the control panel (1 of 2)**

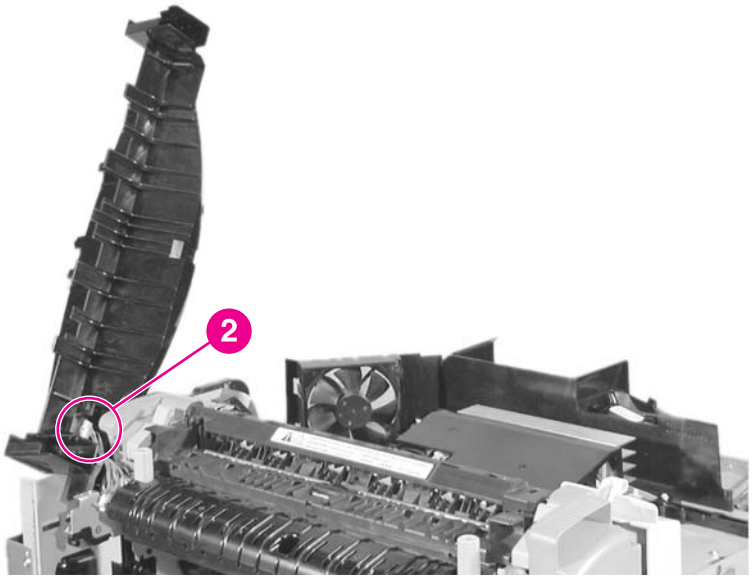


Figure 6-12. **Removing and replacing the control panel (2 of 2)**

To install a new control panel overlay (HP Color LaserJet 5500 models)

1. Position the new overlay over the top of the control panel. Insert the left tab of the overlay into the slot on the printer face.
2. Line up the tab on the right side with the slot.

3. Set the overlay in place by pushing down on the overlay near the right side.

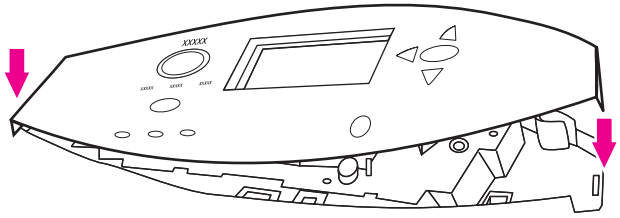


Figure 6-13. **Control panel overlay for 5500 models only**

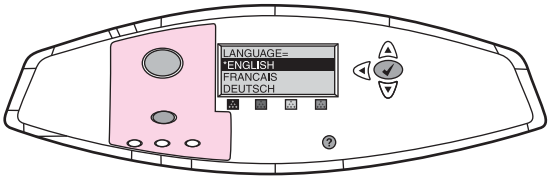


Figure 6-14. **Control panel with label for 5550 models only**

The HP Color LaserJet 5550 models do not have an overlay to replace. This model comes with a control panel label.

Cassette cover

Use the following steps to remove the cassette cover.

To remove the cassette cover

1. Flex the ends of the cover outward to release the hinge pins.
2. Remove the cassette cover.

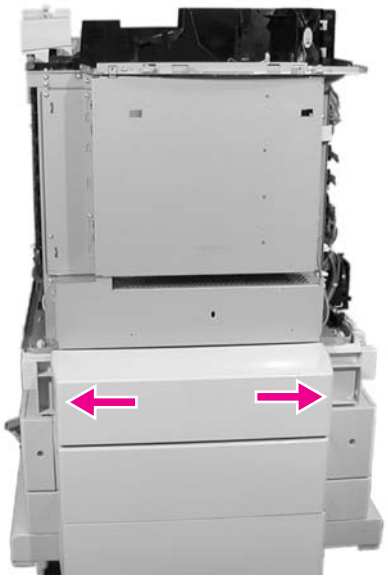


Figure 6-15. **Removing and replacing the cassette cover**

Internal components (front)

Use the following steps to remove and replace the front internal components of the printer.

Paper pickup unit

1. Unhook the two tabs shown in callout 1, and remove the pickup unit cover.
2. Disconnect the connector shown in callout 2.
3. Remove the two screws shown in callout 3, and remove the paper pickup unit.

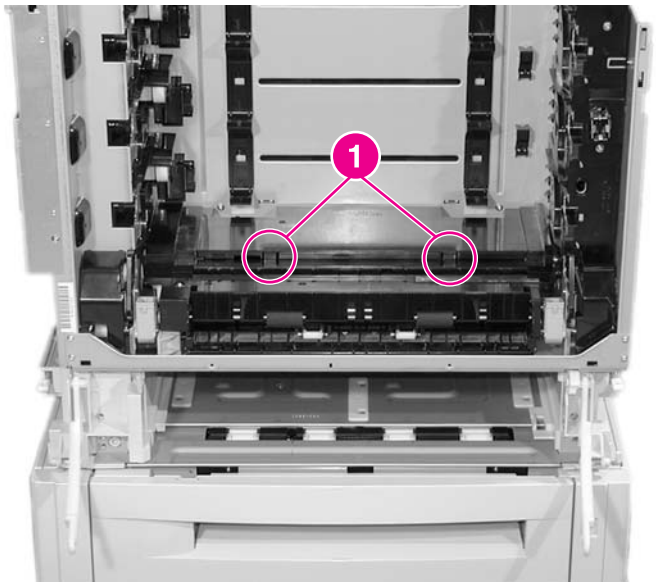


Figure 6-16. **Removing and replacing the paper pickup unit (1 of 2)**

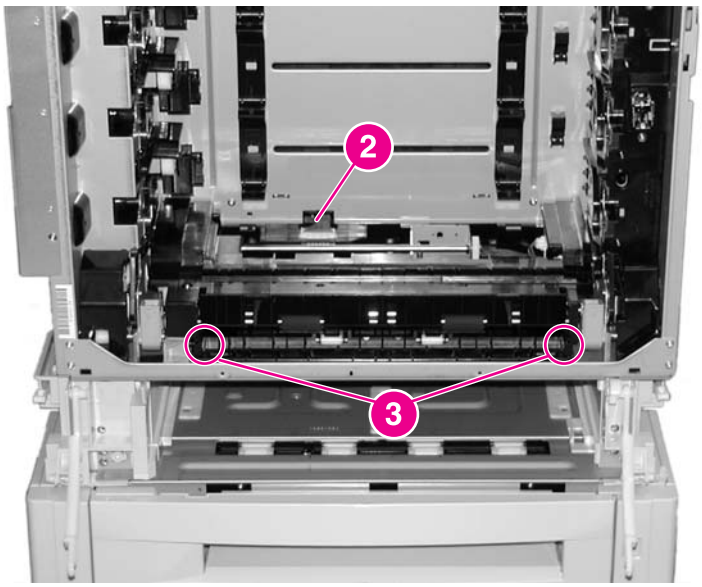


Figure 6-17. **Removing and replacing the paper pickup unit (2 of 2)**

Cassette sensor PCB

Use the following steps to remove the cassette sensor PCB.

To remove the cassette sensor PCB

1. Remove the paper pickup unit. See Paper pickup unit.
2. Remove the two screws shown in callout 1.
3. Disconnect the connector shown in callout 2, and remove the cassette sensor PCB.

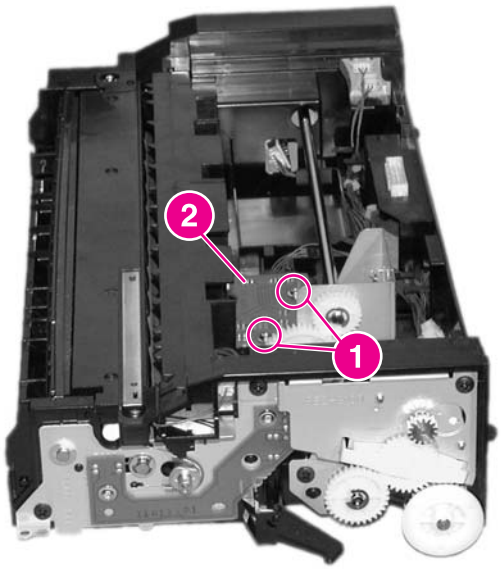


Figure 6-18. **Removing and replacing the paper pickup sensor PCB**

NOTE The side view is shown in callout 1.

Multi-purpose tray sensor PCB

Use the following steps to remove the multi-purpose tray sensor PCB.

To remove and replace the multi-purpose tray sensor PCB

1. Remove the paper pickup unit. See Paper pickup unit.
2. Remove the two screws shown in callout 1.

3. Disconnect the connector shown in callout 2, and remove the multi-purpose tray sensor PCB.

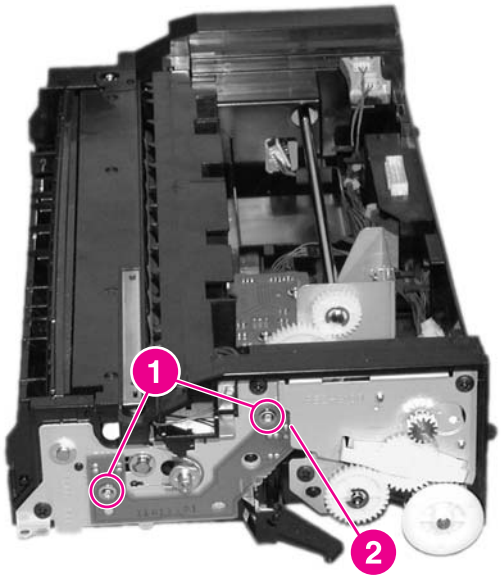


Figure 6-19. **Removing and replacing the multi-purpose tray sensor PCB**

Paper pickup drive unit

Use the following steps to remove the paper pickup drive unit.

To remove the paper pickup drive unit

1. Remove the paper pickup unit. See Paper pickup unit.
2. Remove the e-ring shown in callout 1.
3. Remove the gear shown in callout 2 and the bushing behind the gear.
4. Disconnect the three connectors shown in callout 3.
5. Remove the four screws shown in callout 4.

6. Remove the paper pickup drive unit.

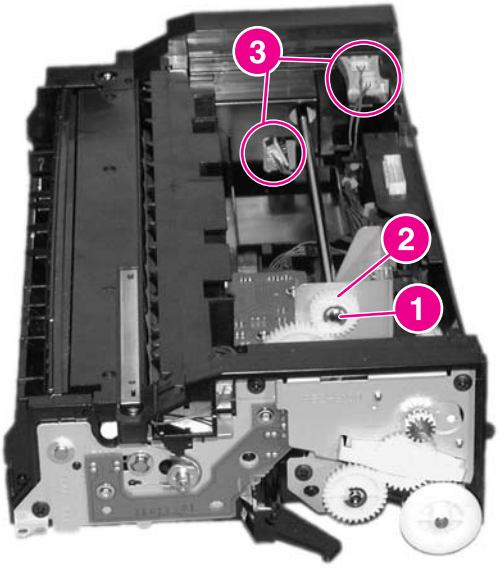


Figure 6-20. **Removing and replacing the paper pickup drive unit (1 of 2)**

NOTE Callouts 1 and 2 are shown in the side view.

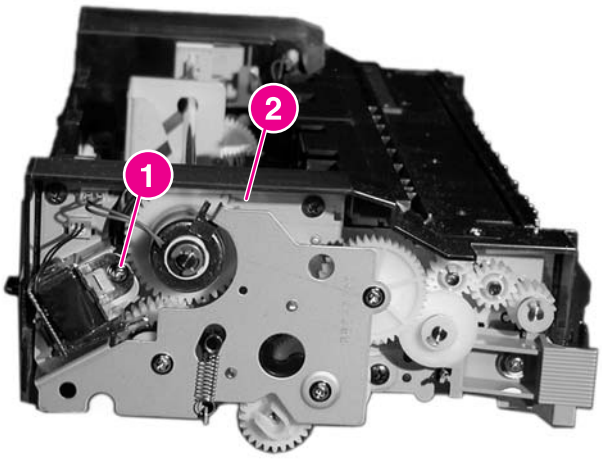


Figure 6-21. **Removing and replacing the paper pickup drive unit (2 of 2)**

Lifter drive unit

Use the following steps to remove the lifter drive unit.

To remove the lifter drive unit

1. Remove the paper pickup unit. See Paper pickup unit.
2. Remove the spring shown in callout 1.

3. Disconnect the connector shown in callout 2.

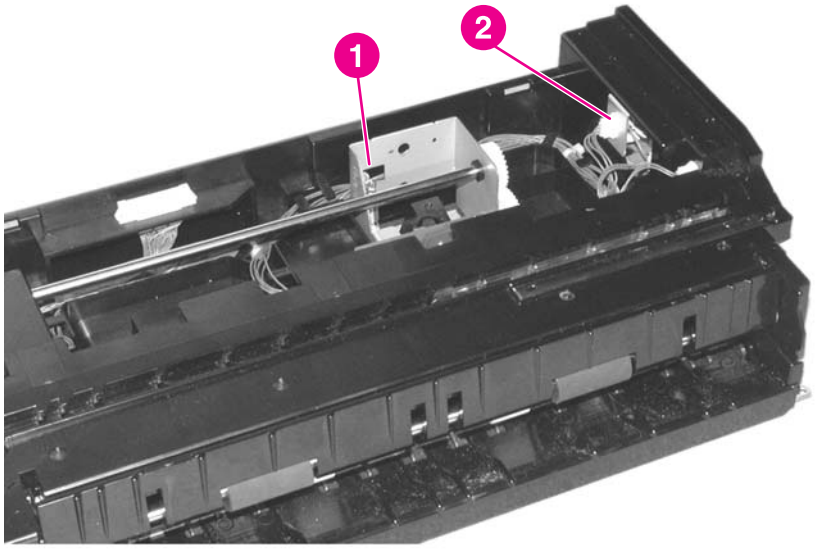


Figure 6-22. **Removing and replacing the lifter drive unit (1 of 3)**

4. From the bottom of the paper pickup unit, remove the e-ring and the bushing shown in callout 3.
5. Remove the other bushing at the end of the shaft, shown in callout 4.

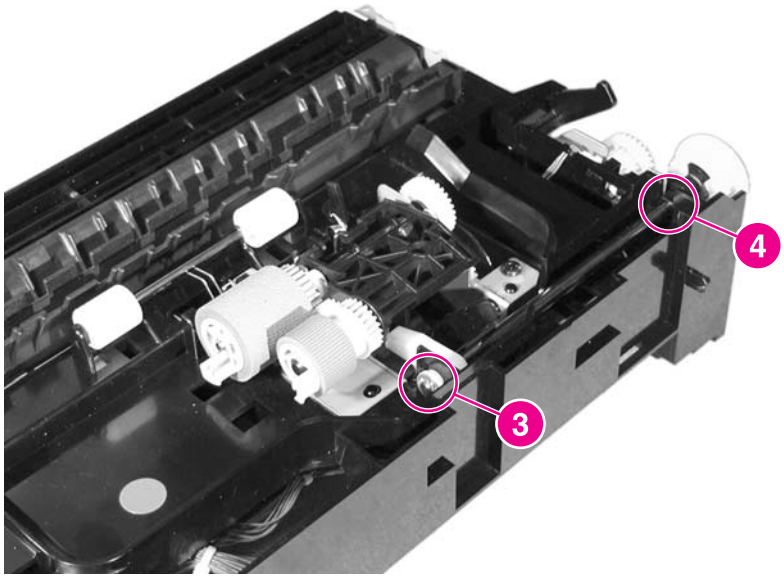


Figure 6-23. **Removing and replacing the lifter drive unit (2 of 3)**

6. Remove the three screws shown in callout 5, and remove the lifter drive unit.

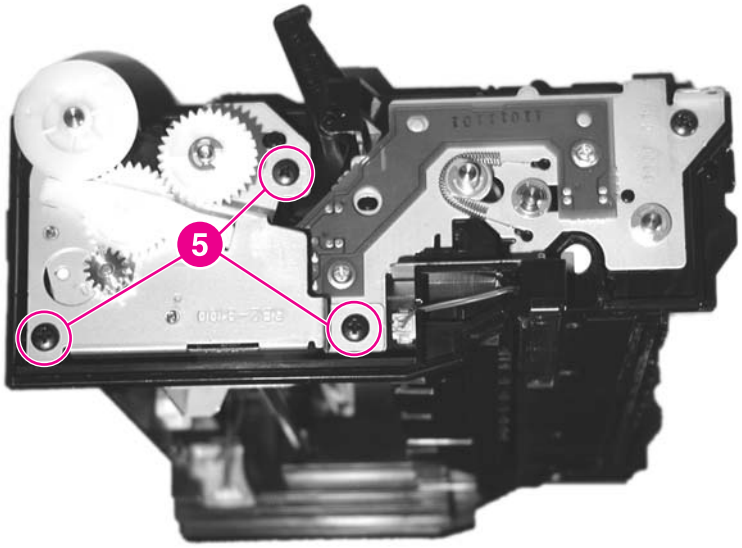


Figure 6-24. **Removing and replacing the lifter drive unit (3 of 3)**

Cassette (Tray 2) paper pickup and feed rollers

Use the following steps to remove the paper pickup and feed rollers.

To remove the paper pickup and feed rollers

1. Remove the cassette.
2. Locate the two rollers on the bottom of the paper pickup unit (above the cassette). The pickup roller is the smaller roller, and the feed roller is the larger roller.
3. Pinch the tab on the end of the cassette pickup roller (callout 1), and pull the roller out.

4. Pinch the tab on the end of the cassette feed roller (callout 2), and pull the roller out.

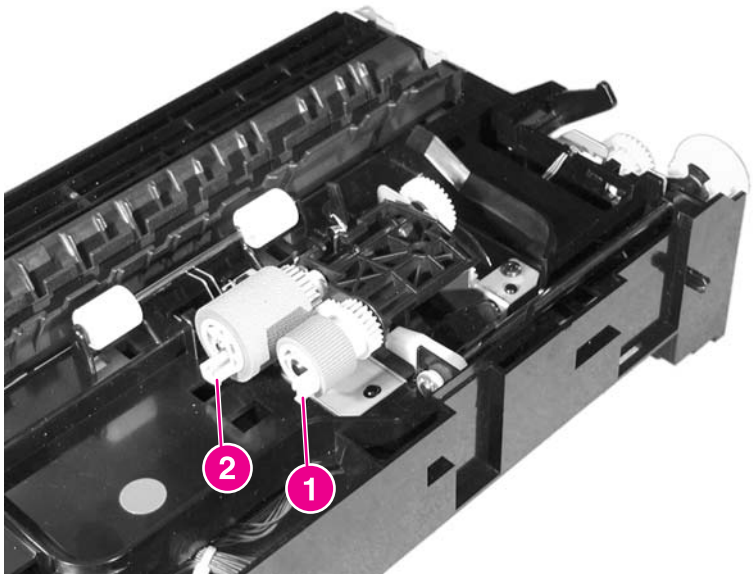


Figure 6-25. **Removing the cassette pickup and feed rollers**

NOTE Always replace the cassette pickup roller and the cassette feed rollers at the same time. Also replace the separation roller (located in the paper cassette) when replacing these rollers.

Solenoid and clutch

Use the following steps to remove the multi-purpose tray solenoid or cassette clutch.

To remove the multi-purpose tray solenoid or cassette clutch

1. Remove the paper pickup unit. See Paper pickup unit.
2. To remove the multi-purpose tray solenoid, remove the screw shown in callout 1 and disconnect the connector shown in callout 2.
3. To remove the cassette clutch, disconnect the connector shown in callout 3, and remove the spring shown in callout 4.
4. Remove the three screws shown in callout 5, and remove the side plate.

5. Remove the e-ring shown in callout 6, and remove the clutch.

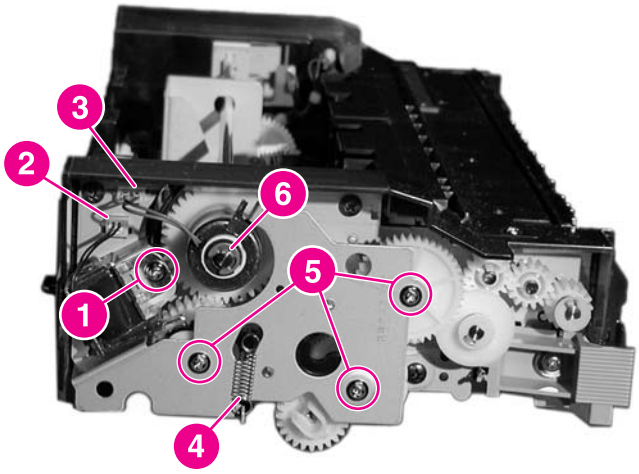


Figure 6-26. **Removing and replacing the solenoid and clutch**

Cassette separation roller

Use the following steps to remove the cassette separation roller.

To remove the cassette separation roller

1. Remove the cassette.
2. Pinch the tab on the end of the cassette separation roller (callout 1), and pull the roller out.

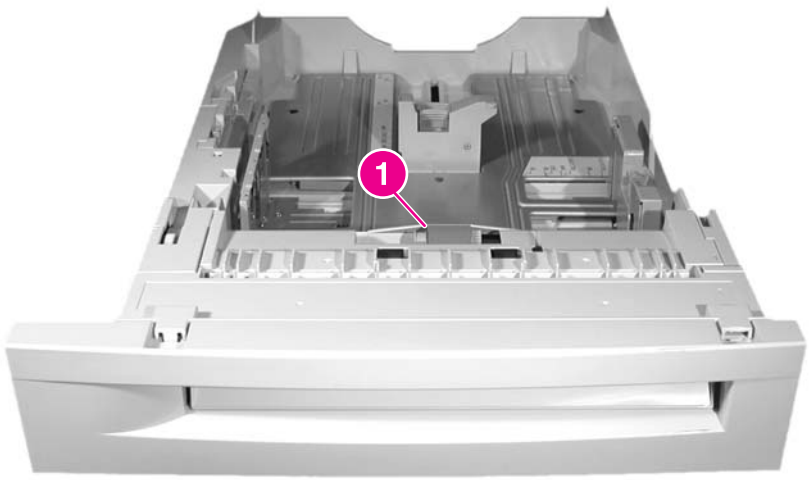


Figure 6-27. **Removing and replacing the cassette separation roller**

Multi-purpose tray pickup roller

Use the following steps to remove the multi-purpose tray pickup roller.

To remove the multi-purpose tray pickup roller

1. Remove the Tray 2 cassette.
2. Unhook the two tabs shown in callout 1, and open the cover.

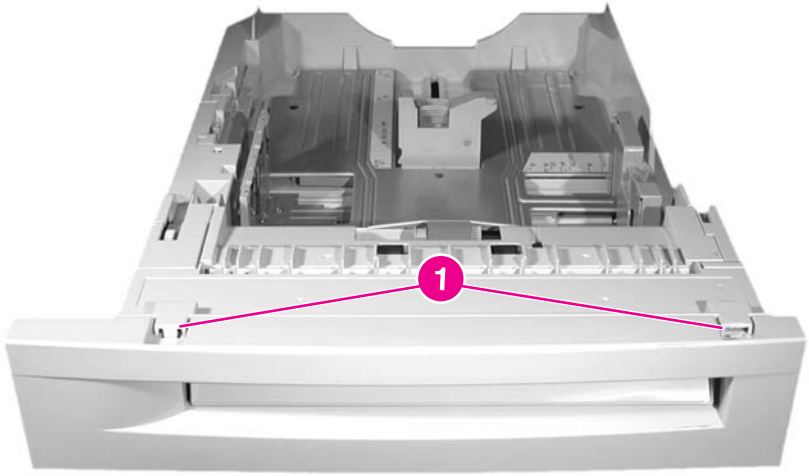


Figure 6-28. **Removing and replacing the multi-purpose tray pickup roller (1 of 2)**

3. Rotate the roller so the blue snap is on top. Release the blue snap by prying it with a flat-blade screwdriver (callout 2).
4. Lift the roller off of the shaft.

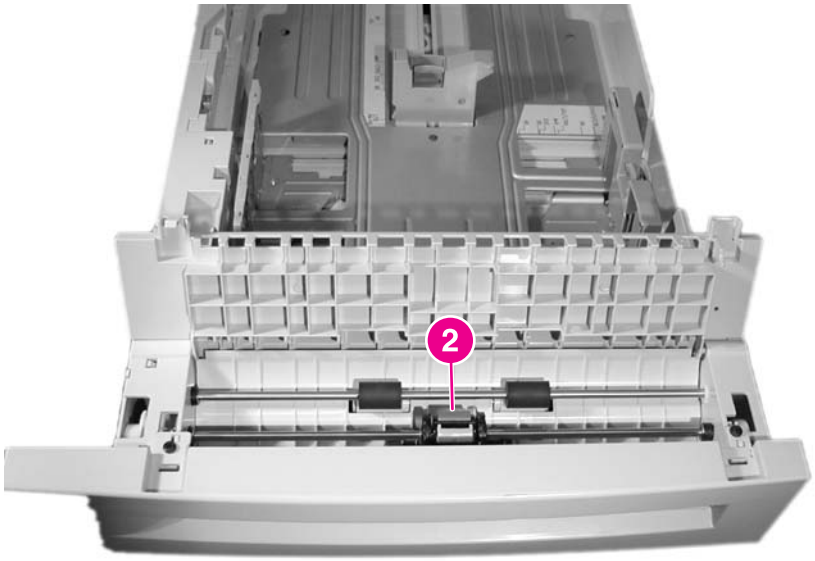


Figure 6-29. **Removing and replacing the multi-purpose tray pickup roller (2 of 2)**

NOTE Always replace the separation pad when you replace the multi-purpose tray pickup roller.

Multi-purpose tray separation pad

Use the following steps to remove the multi-purpose tray separation pad.

To remove the multi-purpose tray separation pad

1. Remove the multi-purpose tray pickup roller. See Multi-purpose tray pickup roller.
2. To provide easier access to the separation pad, remove the e-clip from either of the black rollers and slide the rollers out of the way (callout 1).
3. Press down on the separation pad holder and unhook the two tabs on the separation pad (callout 2).
4. Rotate the separation pad forward and remove it.

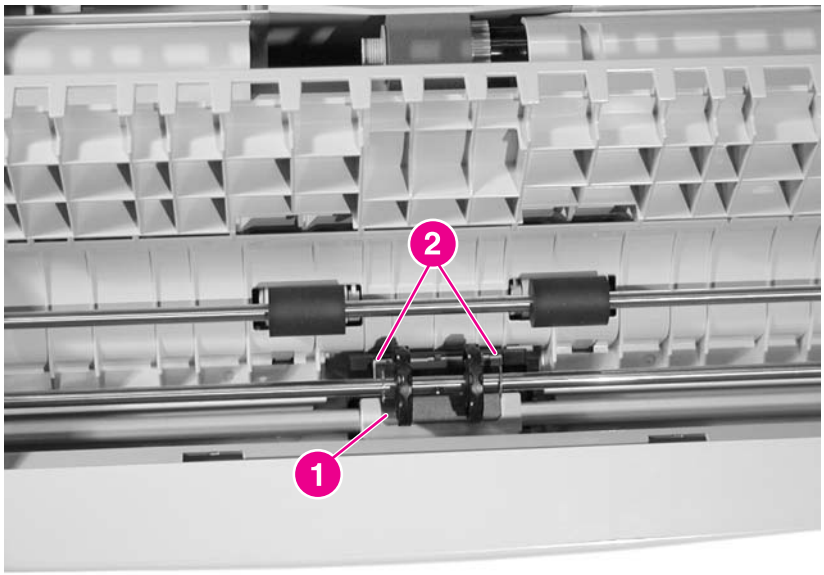


Figure 6-30. **Removing and replacing the multi-purpose tray separation pad**

Color registration detection unit

Use the following steps to remove the color registration detection unit.

To remove the color registration detection unit

1. Open the top cover and the front cover.
2. Remove the ETB.

NOTE To protect the ETB from damage, always remove the ETB when removing the color registration detection unit.

3. Remove the control panel. See Control panel.
4. Disconnect the connector shown in callout 1.

5. Lift up slightly on the color registration detection unit shown in callout 2, and remove it.

CAUTION Do not touch the lens for the color registration detection unit.

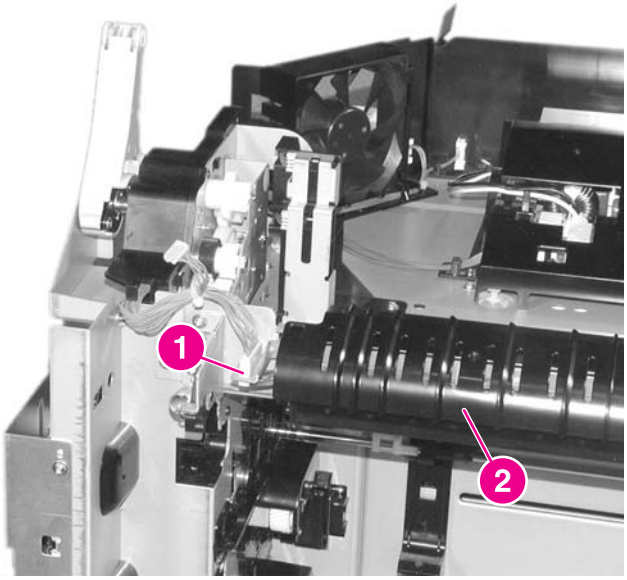


Figure 6-31. **Removing and replacing the color registration detection unit**

Internal components (left side)

Use the following steps to remove and replace the left side internal components of the printer.

DC controller shield

Use the following steps to remove the DC controller shield.

To remove the DC controller shield

1. Remove the print cartridges and the ETB.
2. Remove the rear cover. See Rear cover.
3. Remove the top cover. See Top cover.
4. Remove the rear top cover. Rear top cover.
5. Remove the left cover. See Left cover.
6. Remove the nine screws shown in callout 1.
7. Disconnect the connector that is inside the shield, on the left side.
8. Remove the DC controller shield.

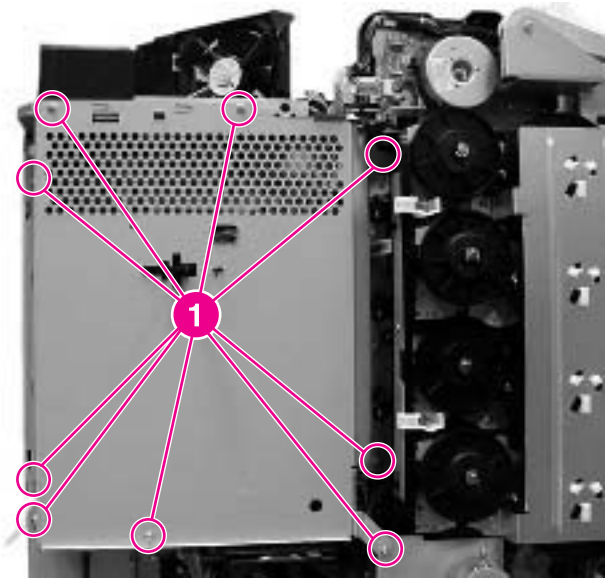


Figure 6-32. **Removing and replacing the DC controller shield**

Environment sensor (HP Color LaserJet 5550 models)

Use the following steps to remove the environment sensor.

To remove the environment sensor

1. Remove the rear cover.
2. Remove the top cover.
3. Remove the rear top cover.
4. Remove the left cover.
5. Remove the right cover.
6. Remove the DC controller shield.
7. Disconnect the connector shown in callout 1.
8. Unhook the two claws shown in callout 2.
9. Remove the environment sensor shown in callout 3.

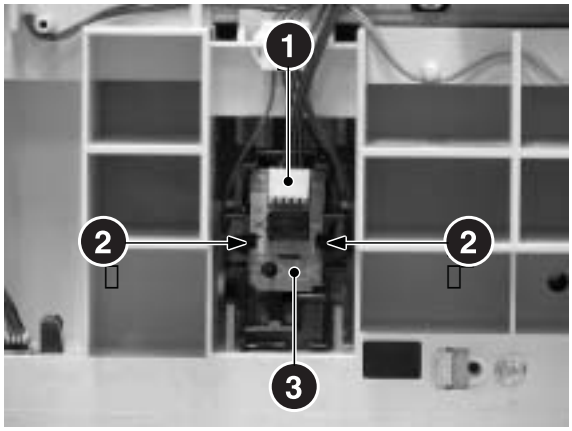


Figure 6-33. **Environment sensor**

Memory tag antenna PCBs

Use the following steps to remove the memory tag antenna PCBs.

Memory tag antenna PCBs

To remove and replace the memory tag antenna PCBs

1. Remove the DC controller shield. See DC controller shield.

2. On the memory controller PCB, disconnect the connector for the memory antenna PCB that you wish to remove (callout 1).

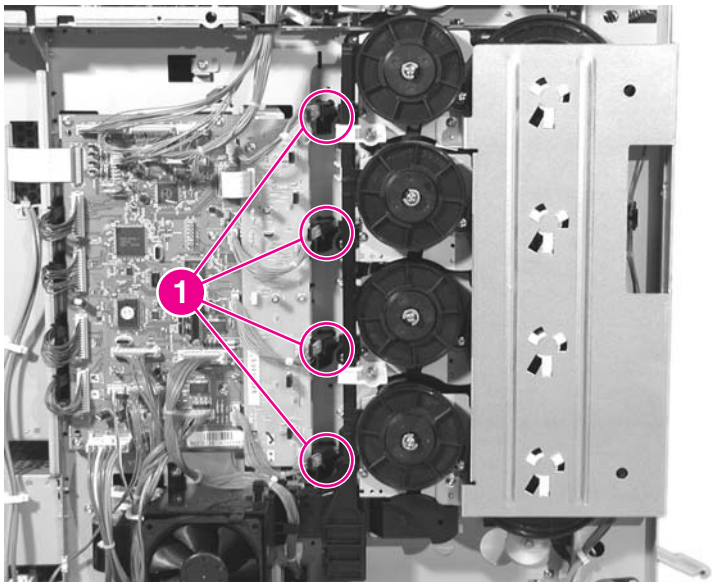


Figure 6-34. **Removing and replacing the memory tag antenna PCBs (1 of 2)**

3. From the front of the printer, unhook the tab that holds the PCB in place (callout 2).
4. Push the PCB to the left and remove it.

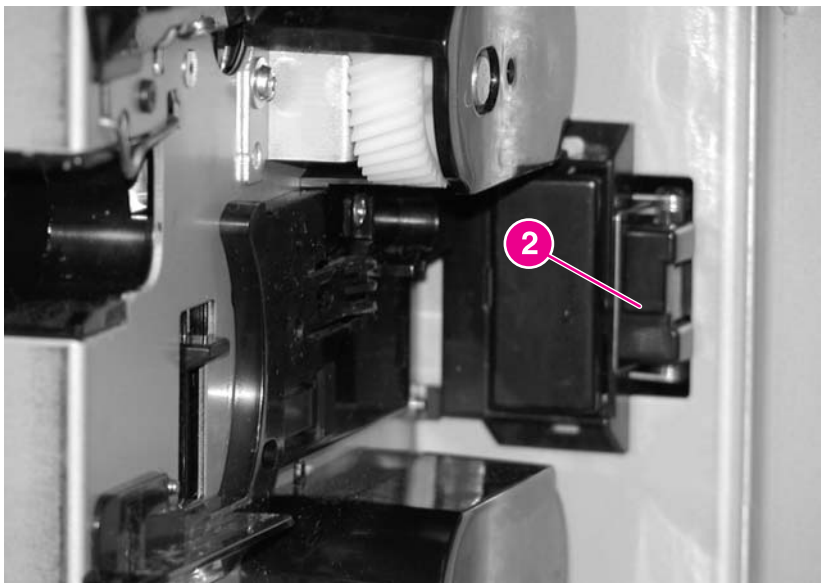


Figure 6-35. **Removing and replacing the memory tag antenna PCBs (2 of 2)**

Developing disengaging drive unit

Use the following steps to remove the developing disengaging drive unit.

To remove the developing disengaging drive unit

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the left cover. See Left cover.
5. Remove the DC controller shield. See DC controller shield.
6. Remove the three screws shown in callout 1.
7. Disconnect the two connectors shown in callout 2.
8. Remove the developing disengaging drive unit.

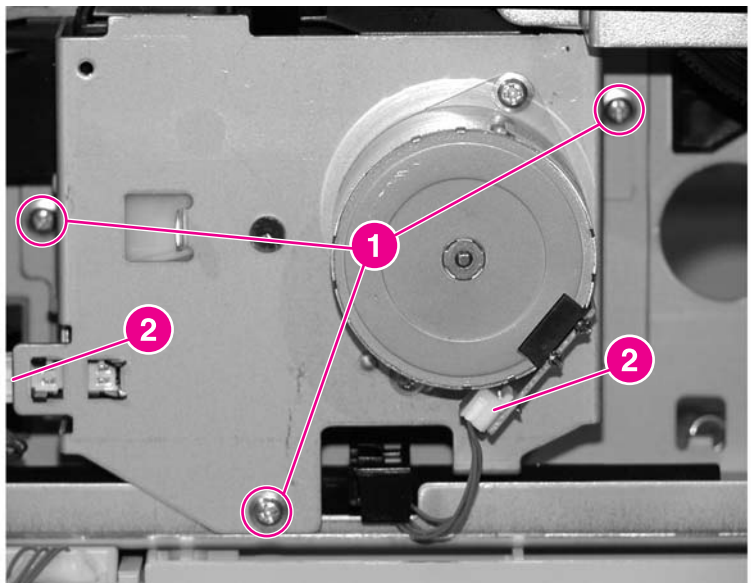


Figure 6-36. **Removing and replacing the developing disengaging drive unit**

Drum drive units

CAUTION Do not remove the e-clip on the end of the drum drive units. Parts are under tension. Replace the complete drum drive assembly rather than taking it apart.

To remove the drum drive gears

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the left cover. See Left cover.
5. Remove the DC controller shield. See DC controller shield.

6. Remove the six screws shown in callout 1, and remove the drum drive grounding plate.

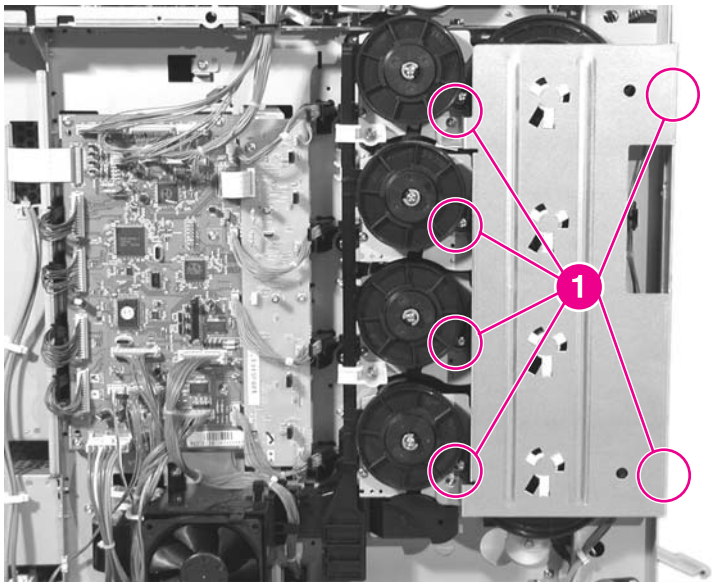


Figure 6-37. **Removing and replacing the drum drive gears (1 of 2)**

7. Remove the four drum drive gears, shown in callout 2.

NOTE The drive gears for the cyan and magenta drum drive units have longer shafts than for the yellow and black drum drive units.

8. Remove the two screws and the two disengaging rod retainers shown in callout 3.
9. Move the disengaging rod up until it disengages from the gear, and pull the arm out (callout 4).

NOTE See the Reinstallation tip for helpful information on reinstalling the developing disengaging rod.

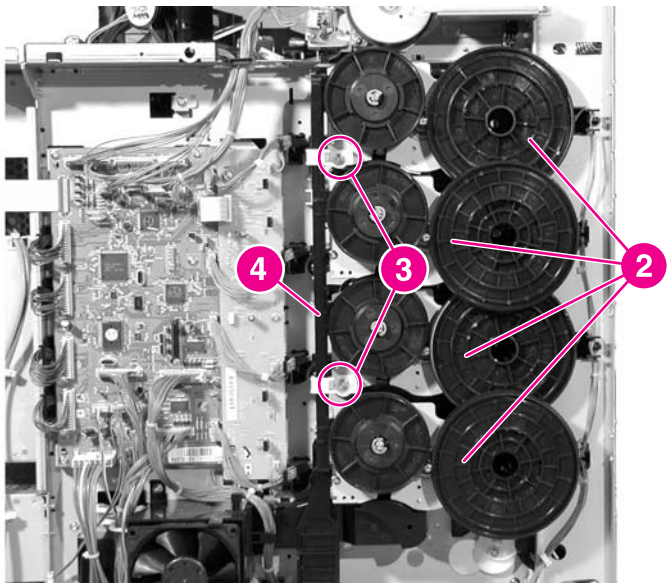


Figure 6-38. **Removing and replacing the drum drive gears (2 of 2)**

NOTE Calibrate the printer after removing and replacing any of the drum drive gears. See Calibrate now (HP Color LaserJet 5500 models only).

To remove the drum drive assemblies

1. Remove the drum drive gears. See To remove the drum drive gears .
2. From the front of the printer, release the tabs on the link arm cover, shown in callout 1.

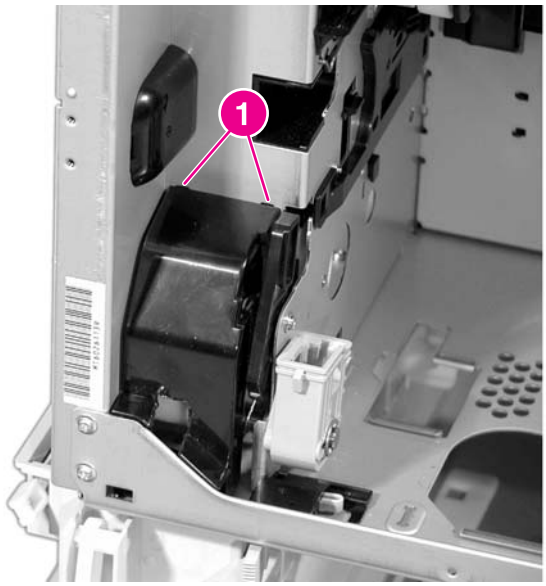


Figure 6-39. **Removing and replacing the drum drive assemblies (1 of 4)**

3. Remove the link arm shown in callout 2.

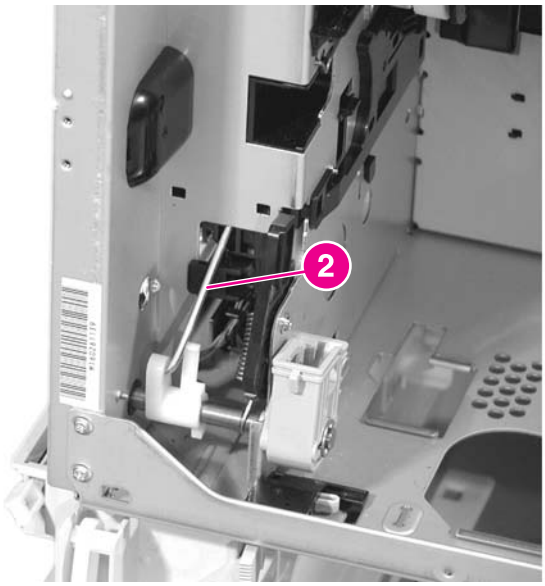


Figure 6-40. **Removing and replacing the drum drive assemblies (2 of 4)**

4. Remove the drum drive release plate shown in callout 3.

5. On the drum drive unit that you wish to remove, disconnect the appropriate connector shown in callout 4.

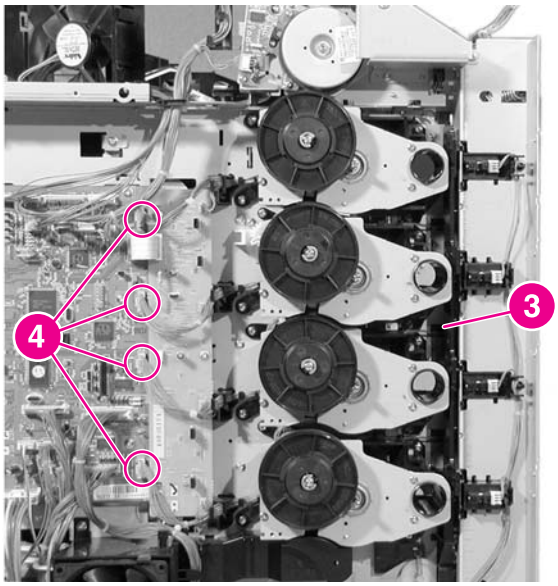


Figure 6-41. **Removing and replacing the drum drive assemblies (3 of 4)**

6. Remove the four screws shown in callout 5.
7. Remove the drum drive assembly.

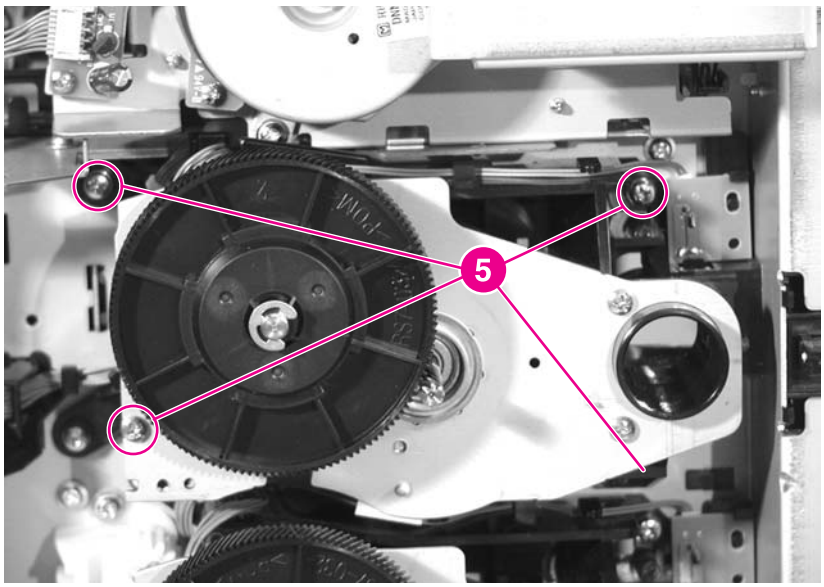


Figure 6-42. **Removing and replacing the drum drive assemblies (4 of 4)**

NOTE Calibrate the printer after removing and replacing any of the drum drive assemblies. See Calibrate now (HP Color LaserJet 5500 models only).

Reinstallation tip

When reinstalling the developing disengaging rod, be sure to rotate the white gear (located between the black and magenta drum drive units) fully clockwise until it comes to a complete stop, as indicated in callout 6 below.

NOTE Failure to position the gear properly will result in improper printer operation and possible print quality defects.

Also make sure the developing disengaging rod passes through the slots in the drive clutches (in the up position, callout 7) in each of the four drum drive units, engaging each clutch. The clutch on the yellow drum drive unit is particularly difficult to see and engage properly.

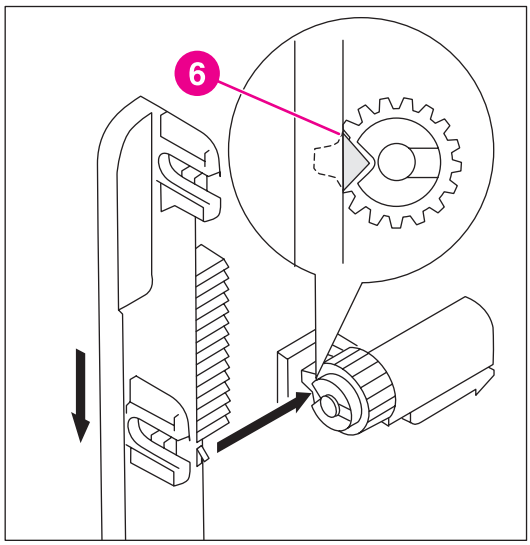


Figure 6-43. **Reinstalling the developing disengaging rod (1 of 2)**

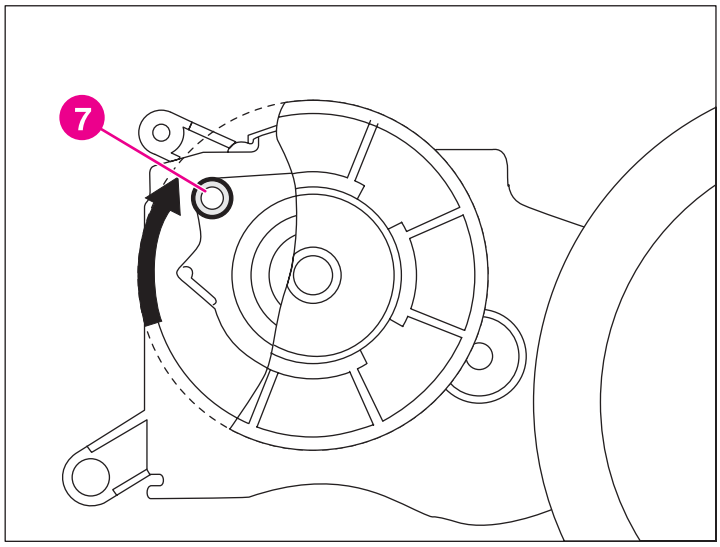


Figure 6-44. **Reinstalling the developing disengaging rod (2 of 2)**

E-label memory controller PCB

Use the following steps to remove the e-label memory controller PCB.

To remove the e-label memory controller PCB

1. Remove the DC controller shield. See DC controller shield.
2. Remove the three screws shown in callout 1.
3. Disconnect the nine connectors shown in callout 2.
4. Remove the e-label memory controller PCB.

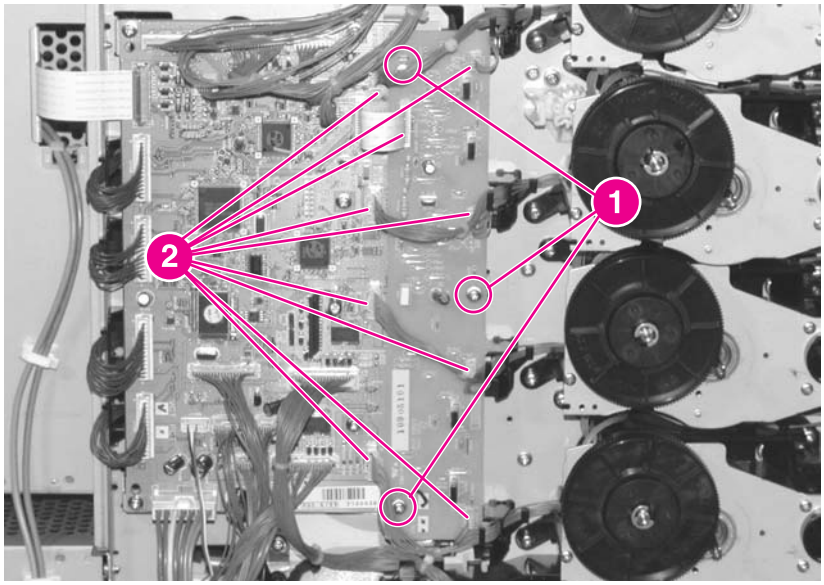


Figure 6-45. **Removing and replacing the e-label memory controller PCB**

DC controller PCB

Use the following steps to remove the DC controller PCB.

To remove the DC controller PCB

1. Remove the DC controller shield. See DC controller shield.
2. Remove the five screws shown in callout 1.
3. Disconnect all the connectors on the DC controller PCB, including the formatter ribbon cable shown in callout 2.

NOTE The DC controller shown is for the HP Color LaserJet 5500 model.

CAUTION When removing the formatter ribbon cable, be careful not to tear it or to damage the connector. Gently release the brown tab over the connection. Do not pull on the ribbon cable without releasing this tab.

4. Remove the DC controller PCB.

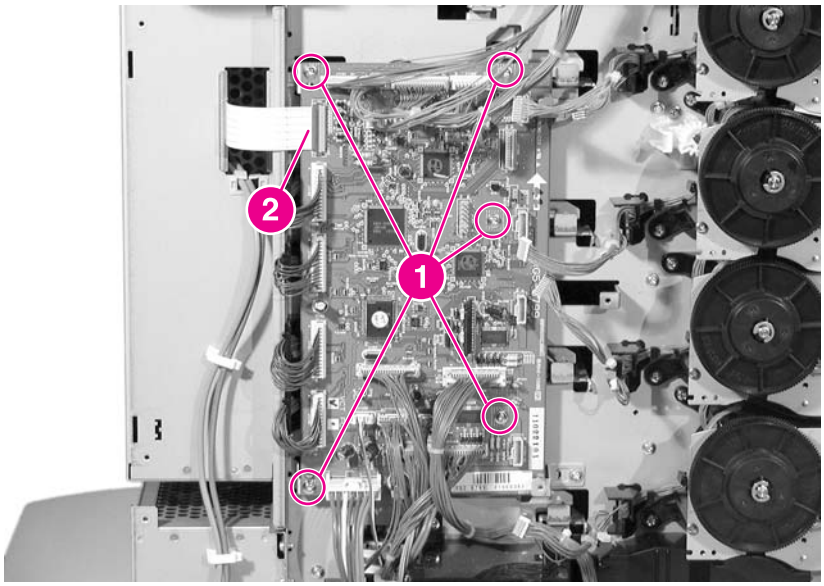


Figure 6-46. **Removing and replacing the DC controller PCB**

NOTE Calibrate the printer after removing or replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Cassette paper size detection switches

This printer has two sets of switches to detect paper size in the cassette. These switches are located on the left side of the printer, below the power supply fan. The paper length detection switch set is further back than the paper width detection switch set.

To remove the cassette paper length and width detection switches

1. Remove the cassette.
2. Remove the left cover. See Left cover.
3. Disconnect the connector shown in callout 1.
4. Squeeze the two tabs shown in callout 2, and remove the cassette paper length detection switch by pushing it into the cassette cavity.
5. Remove the switch cover shown in callout 3, and disconnect the connector indicated in callout 4 (it is behind the cover).

6. Remove the paper width detection switch by squeezing the two tabs, in the same manner as for the paper length detection switch.

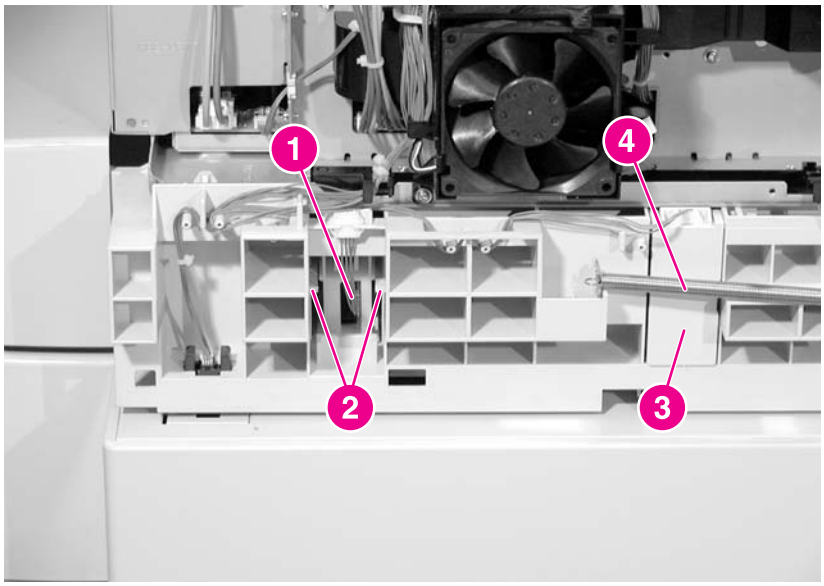


Figure 6-47. **Removing and replacing the cassette paper size detection switch**

Power supply fan

Use the following steps to remove and replace the power supply fan.

To remove the power supply fan

1. Remove the DC controller shield. See DC controller shield.
2. Disconnect the connector shown in callout 1.
3. Unhook the three tabs shown in callout 2, and remove the power supply fan.

Reinstallation tip

When reinstalling the power supply fan, be sure that the arrow marked on the fan holder and the arrow marked on the fan are pointing in the same direction.

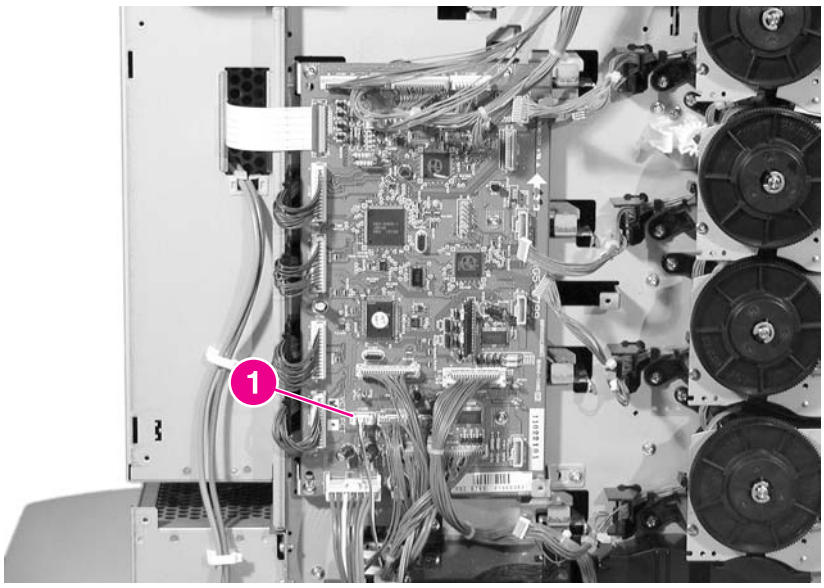


Figure 6-48. **Removing and replacing the power supply fan (1 of 2)**

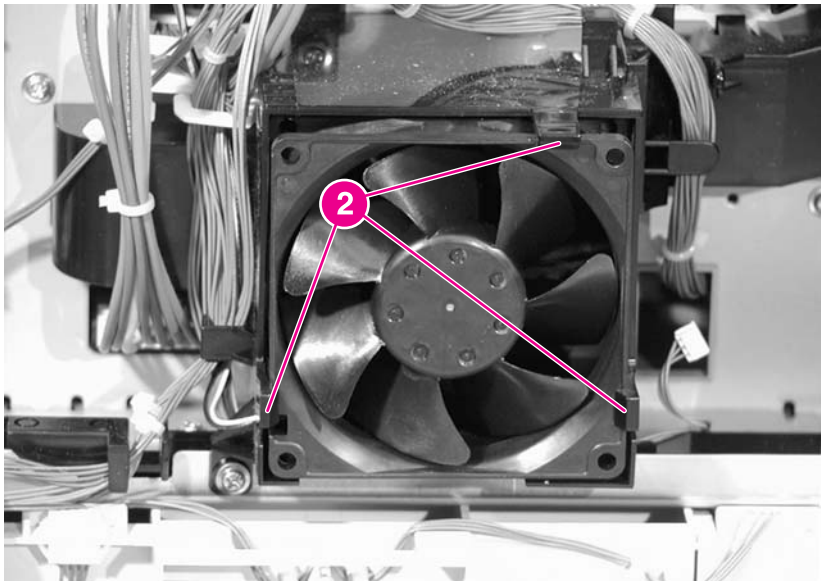


Figure 6-49. **Removing and replacing the power supply fan (2 of 2)**

Internal components (rear)

Use the following steps to remove and replace the rear internal components of the printer.

Formatter

Use the following steps to remove the formatter.

To remove the formatter

1. Remove the eight screws shown in callout 1.

2. Grasp the black disk drive lock shown in callout 2, and pull the formatter out of the printer.

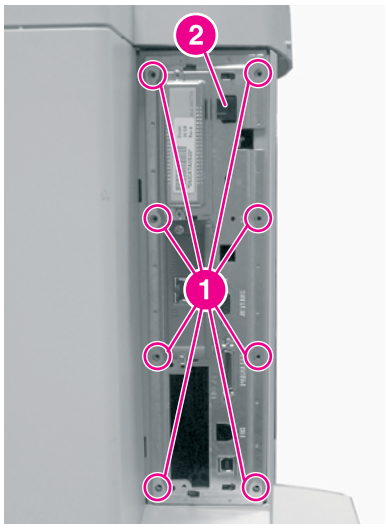


Figure 6-50. **Removing and replacing the formatter (HP Color LaserJet 5550)**

NOTE Calibrate the printer after replacing the formatter. See Calibrate now (HP Color LaserJet 5500 models only) for instructions. The formatter above represents the HP Color LaserJet 5550 printer.

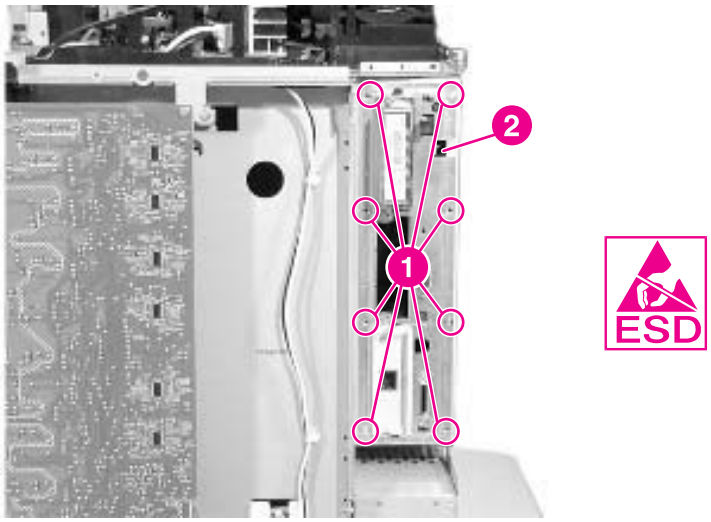


Figure 6-51. **Removing and replacing the formatter (HP Color LaserJet 5500)**

NOTE The formatter shown above represents the HP Color LaserJet 5500 model.

Low-voltage power supply

Use the following steps to remove the low-voltage power supply.

To remove the low-voltage power supply

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the left cover. See Left cover.
5. Remove the DC controller shield. See DC controller shield.
6. Remove the right cover. See Right cover.
7. Disconnect the two connectors shown in callout 1.

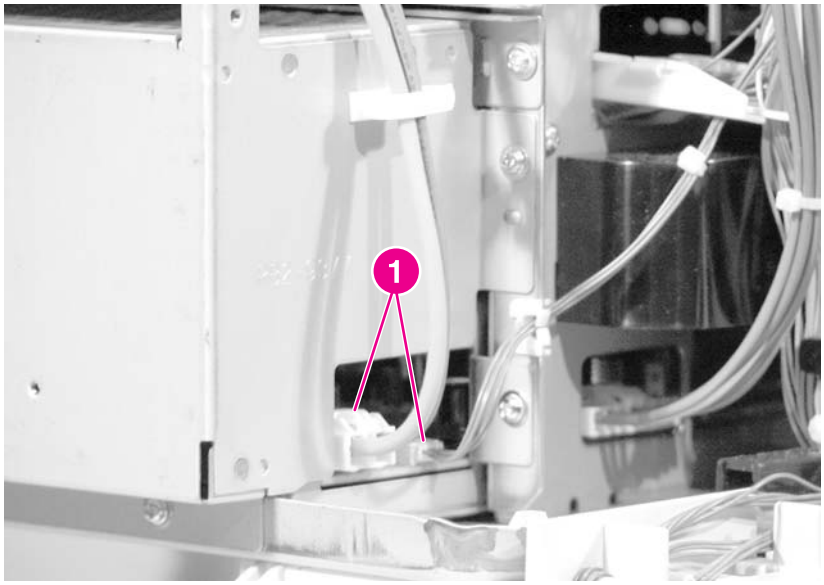


Figure 6-52. **Removing and replacing the low-voltage power supply, left side of printer (1 of 4)**

8. At the rear of the printer, remove the four screws shown in callout 2.
9. Remove the cables from the cable clips, and remove the power supply cover.

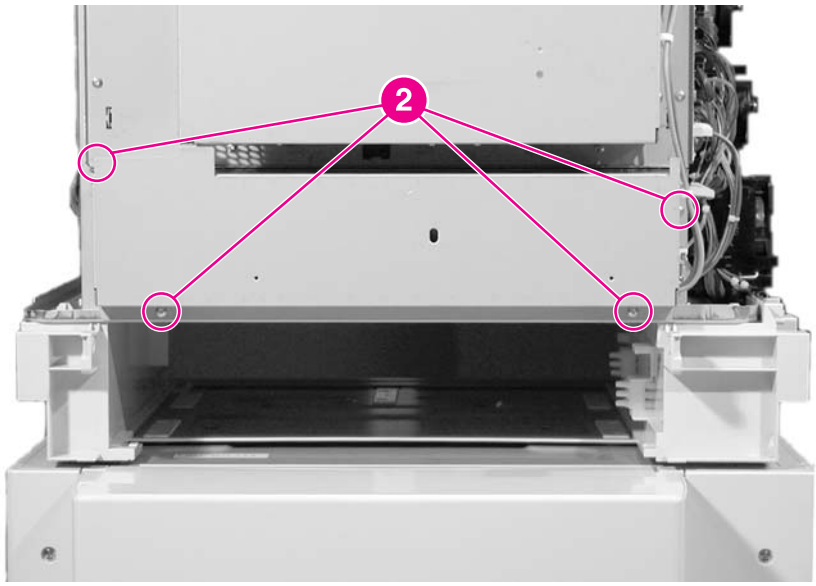


Figure 6-53. **Removing and replacing the low-voltage power supply, rear of printer (2 of 4)**

10. On the right side of the printer, unhook the switch rod from the low-voltage power supply, shown in callout 3.
11. Remove the two screws shown in callout 4.
12. Disconnect the connector shown in callout 5.

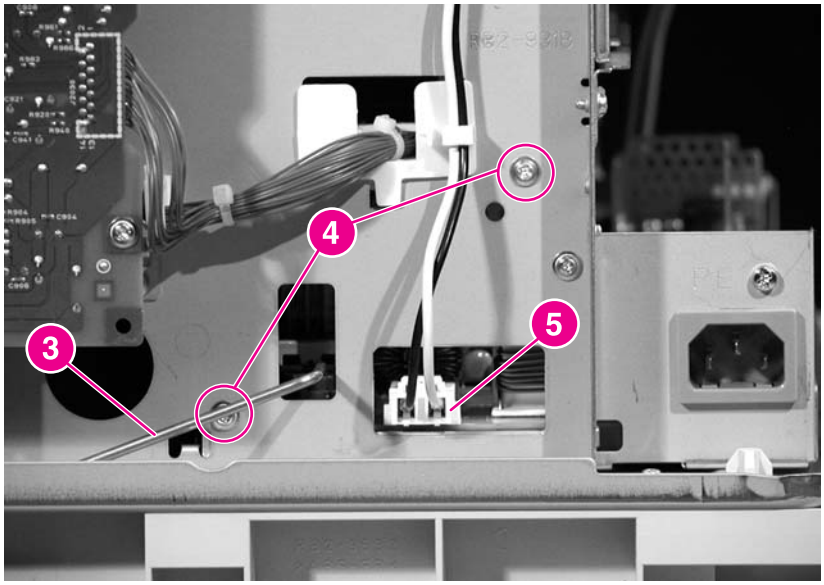


Figure 6-54. **Removing and replacing the low-voltage power supply, right side of printer (3 of 4)**

13. At the left rear corner of the printer, remove the screw shown in callout 6.
14. Disconnect the connector shown in callout 7.
15. Slide the low-voltage power supply unit (callout 8) out of the printer.

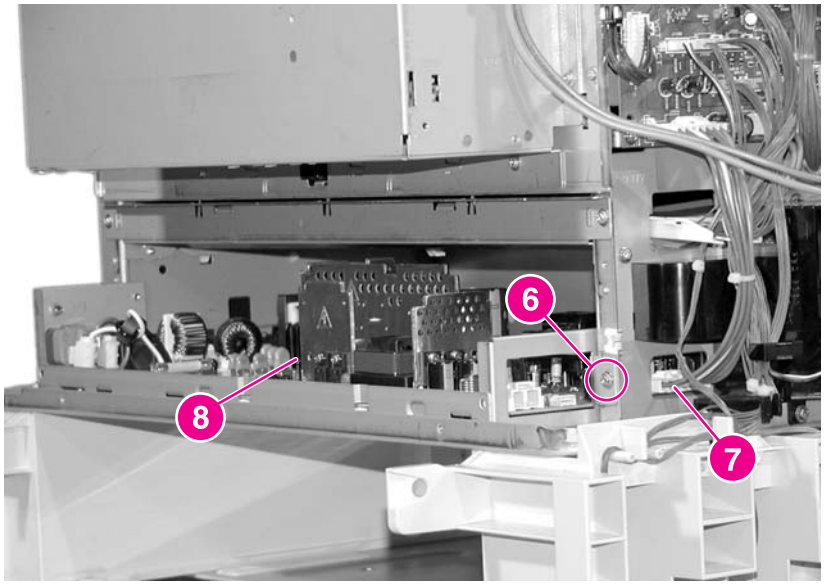


Figure 6-55. **Removing and replacing the low-voltage power supply (4 of 4)**

Formatter case

Use the following steps to remove the formatter case.

To remove the formatter case

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the left cover. See Left cover.
5. Remove the DC controller shield. See DC controller shield.
6. Remove the right cover. See Right cover.
7. Disconnect the formatter ribbon cable shown in callout 1.

CAUTION When removing the formatter ribbon cable, be careful not to tear it. Use a flat-blade screwdriver to release the brown tab over the connection. Do not pull on the ribbon cable without releasing this tab.

8. If you have not already removed the low-voltage power supply unit, disconnect the connector shown in callout 2.

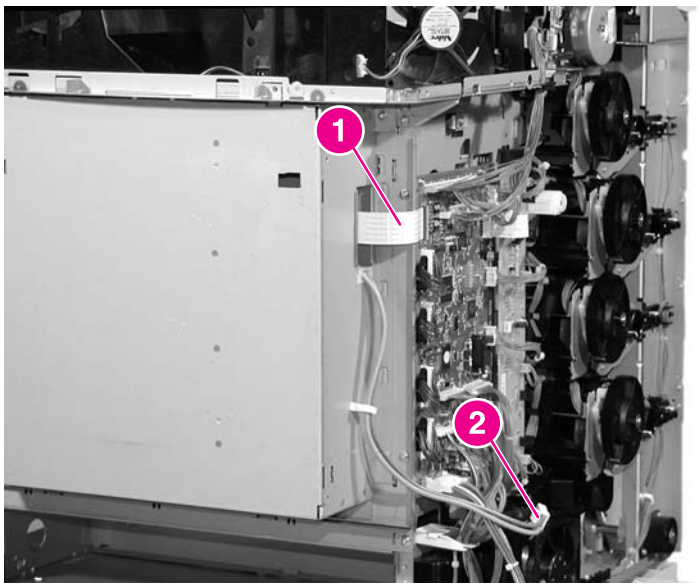


Figure 6-56. **Removing and replacing the formatter case (1 of 2)**

9. At the rear of the printer, remove the screws shown in callout 3.

10. Remove the formatter case

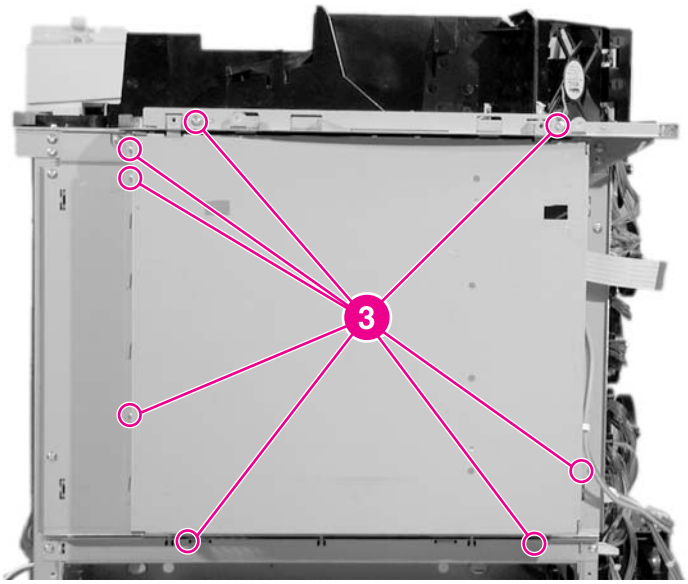


Figure 6-57. **Removing and replacing the formatter case (2 of 2)**

Laser/scanner units

Use the following steps to remove and replace the laser/scanner units.

To remove the laser/scanner cover plate

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the left cover. See Left cover.
5. Remove the DC controller shield. See DC controller shield.
6. Remove the right cover. See Right cover.
7. Remove the formatter case. See Formatter case.
8. At the rear of the printer, place the cardboard spacer (included with the laser/scanner unit) underneath the V mark on the bottom of the printer frame, as shown in callout 1.

CAUTION Always place the spacer under the printer frame. This spacer is important to support the printer and keep it from flexing when the plate that covers the laser/scanners is removed. If the printer frame flexes, the laser beams may become skewed, resulting in print quality problems.

9. Remove the seven screws shown in callout 2.

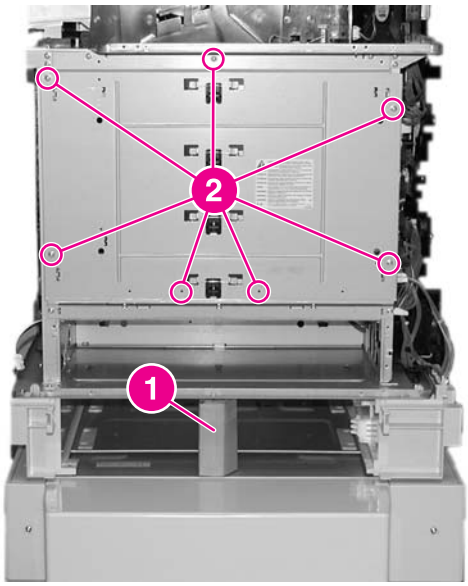


Figure 6-58. **Removing and replacing the laser/scanner units (1 of 8)**

10. Using needle-nose pliers, unhook the right end of the wire clip, then release the left side of the clip from the bracket. Repeat this procedure for each of the four clips.
11. Remove the plate that covers the laser/scanner units.

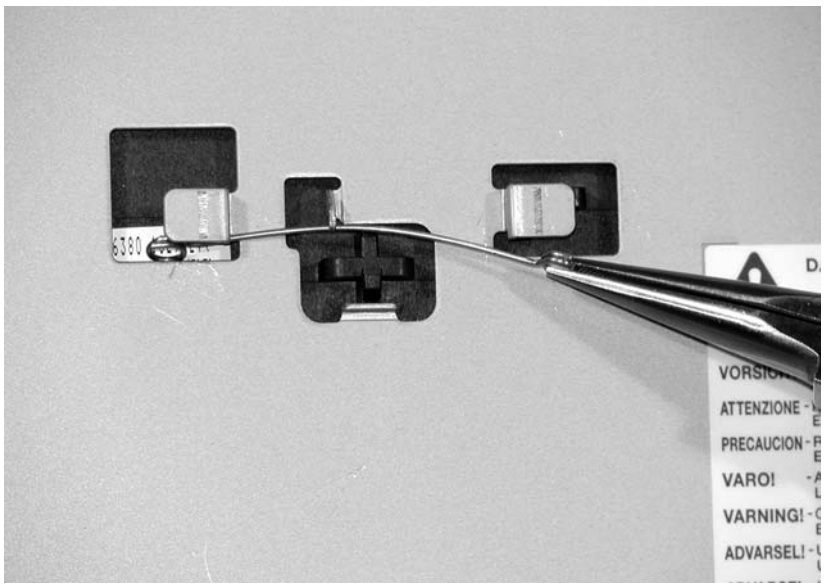


Figure 6-59. **Removing and replacing the laser/scanner units (2 of 8)**

Reinstallation tip

When reinserting the four wire clips, insert the left end of the clip first, thread the clip under the center notch, and then insert the right end of the clip.

12. Disconnect the four laser/scanner connectors from the DC controller (callout 3).

13. Unwind the cables from the stays, and thread the connectors through the slot so they are free of the printer frame.

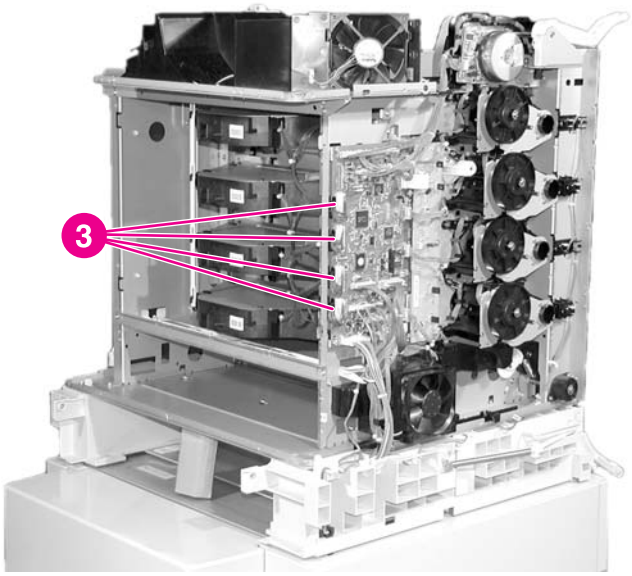


Figure 6-60. **Removing and replacing the laser/scanner units (3 of 8)**

14. On the left side of the printer, remove the screw above the DC controller, shown in callout 4.

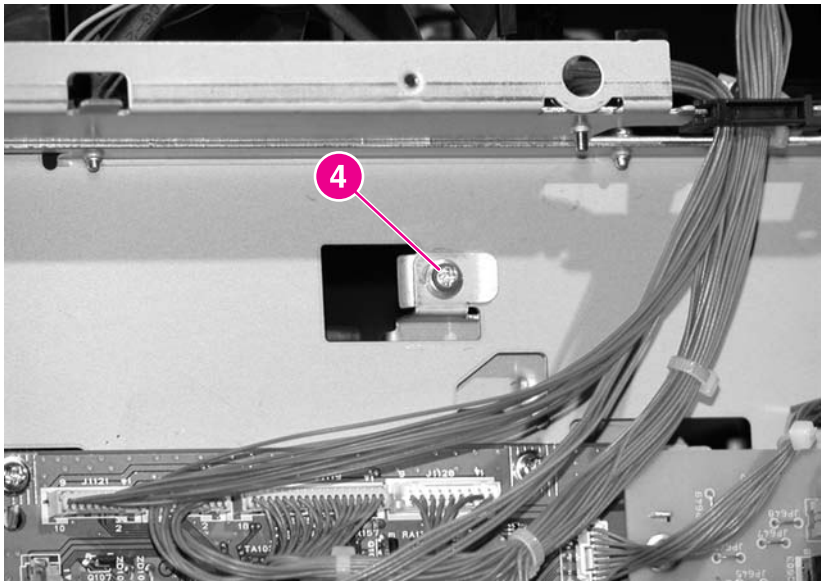


Figure 6-61. **Removing and replacing the laser/scanner units (4 of 8)**

15. Grasp the top of the laser/scanner retaining bar where indicated in callout 5, and push it towards the laser/scanners to release it.

16. Rotate the bar down.

CAUTION The scanner retaining bars are under spring tension. Remove them carefully.

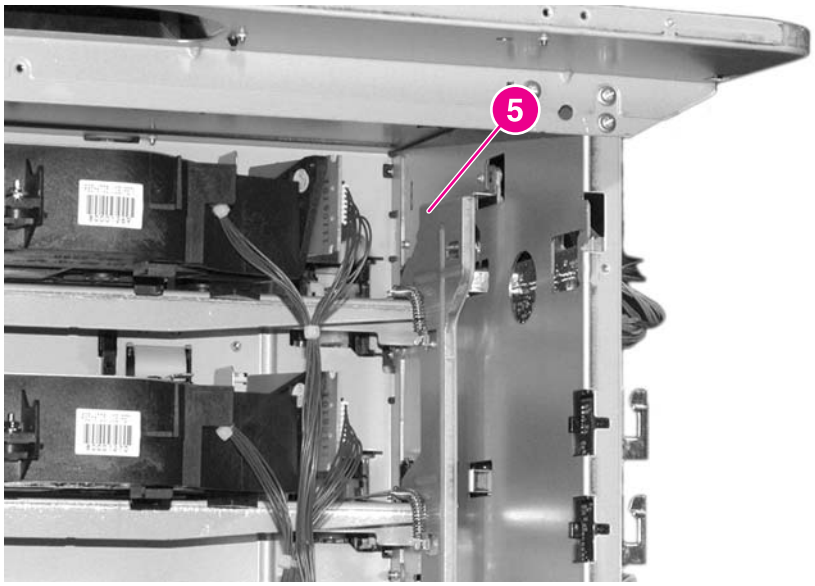


Figure 6-62. **Removing and replacing the laser/scanner units (5 of 8)**

17. On the right side of the printer, remove the screw shown in callout 6.

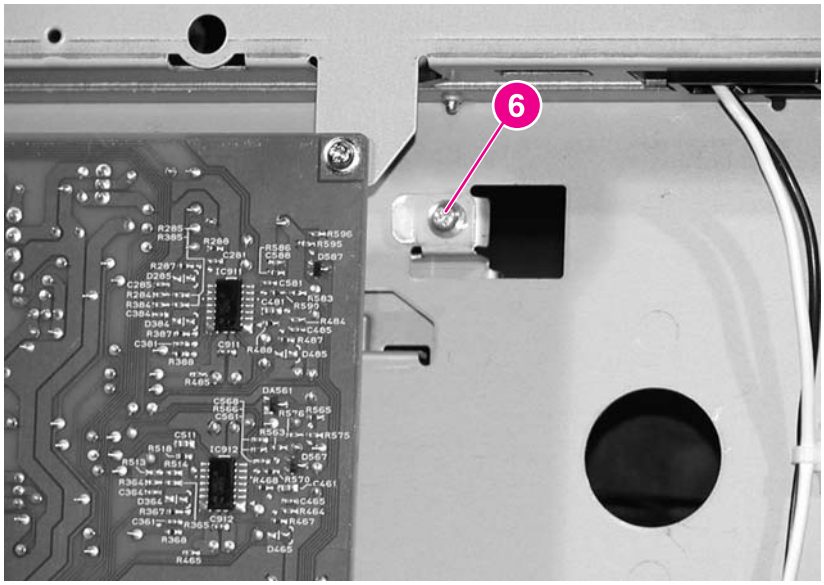


Figure 6-63. **Removing and replacing the laser/scanner units (6 of 8)**

18. Grasp the top of the laser/scanner retaining bar where indicated in callout 7, and push it towards the laser/scanners to release it.

19. Rotate the bar down.

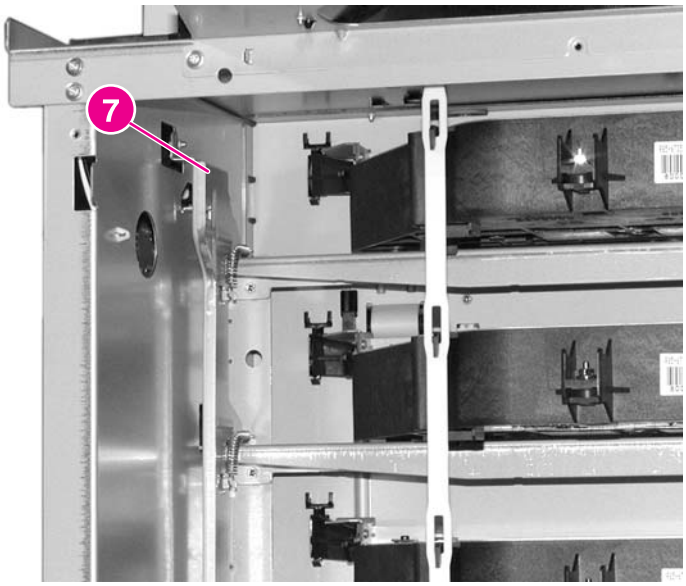


Figure 6-64. **Removing and replacing the laser/scanner units (7 of 8)**

Reinstallation tip

Reinstall the laser/scanner retaining bars in the same order you removed them: the left side and then the right side. Feed the connector cables through the frame and reconnect the connectors to the DC controller.

20. Unhook each laser/scanner unit from the white strap shown in callout 8. Then pull the laser/scanner units out of the printer.

CAUTION When reinstalling the laser/scanner units, always reconnect the laser/scanner units to the strap. Failure to do so could cause the laser/scanners to become distorted, and the laser beam could become skewed, resulting in image defects. Also check that the scanners are aligned and seated properly.

CAUTION The laser/scanner unit is not adjustable in the field. Do not disassemble it.

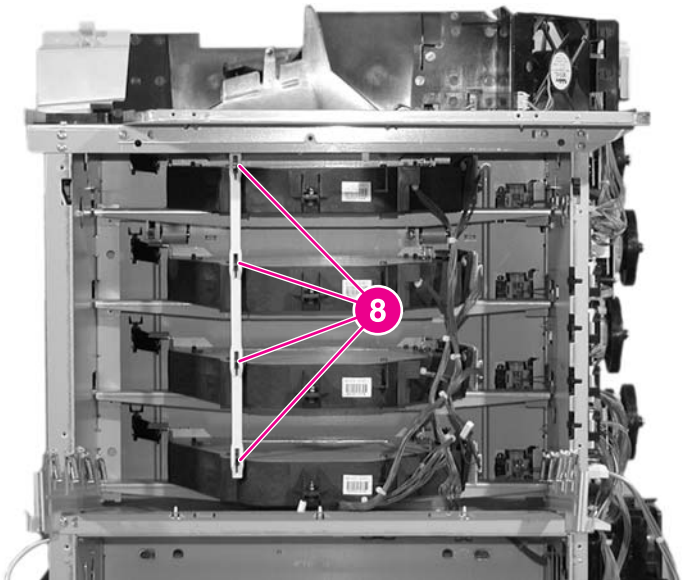


Figure 6-65. **Removing and replacing the laser/scanner units (8 of 8)**

Internal components (right side)

Use the following steps to remove and replace the right side internal components of the printer.

High-voltage power supply PCB

Use the following steps to remove and replace the high-voltage power supply PCB.

To remove the high-voltage power supply PCB

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the right cover. See Right cover.
5. Remove the four screws and the mount retainer shown in callout 1.
6. Pinch the four clips shown in callout 2, and free the board.
7. Disconnect the connector shown in callout 3.
8. Remove the high-voltage power supply PCB.

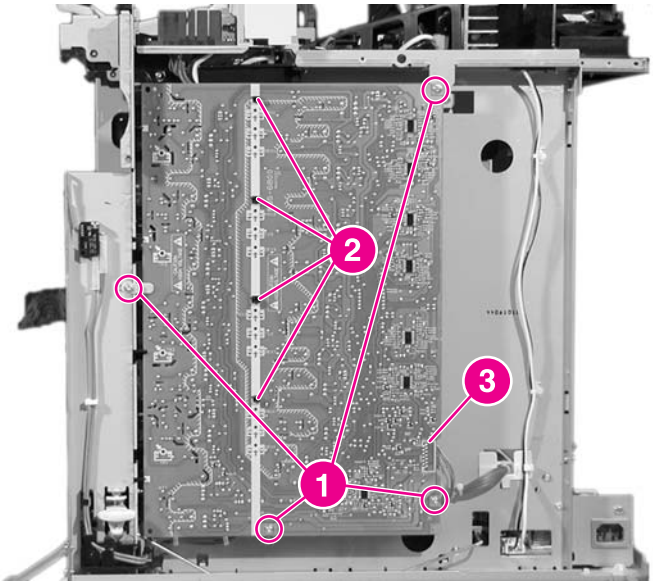


Figure 6-66. **Removing and replacing the high-voltage power supply PCB**

Reinstallation tip

When reinstalling the high-voltage power supply PCB, be sure to align the white markings on the left side of the PCB with the hooks on the printer, then snap in the PCB. You can verify that the PCB is aligned correctly by observing the 12 holes shown in callout 4. When the PCB is aligned correctly, you will be able to see part of the contact springs, as shown in callout 5.

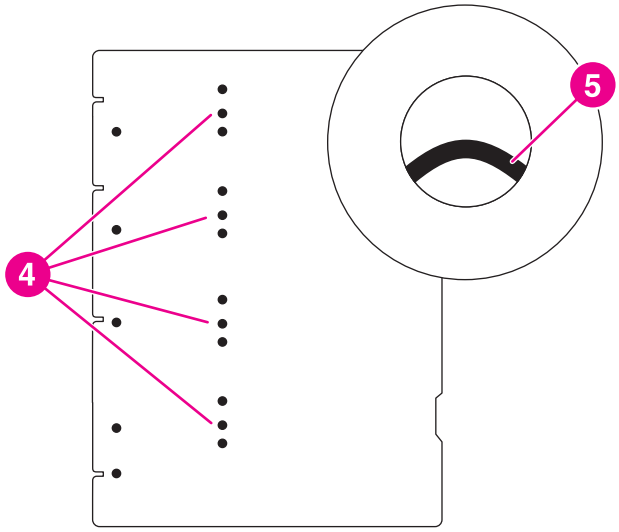


Figure 6-67. **Aligning the high-voltage power supply PCB**

Toner level detection PCB

Use the following steps to remove the toner level detection PCB.

To remove the toner level detection PCB

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the right cover. See Right cover.
5. Remove the high-voltage power supply PCB. See To remove the high-voltage power supply PCB.
6. Remove the four screws shown in callout 1.
7. Disconnect the connector shown in callout 2.
8. Remove the toner level detection PCB (callout 3).

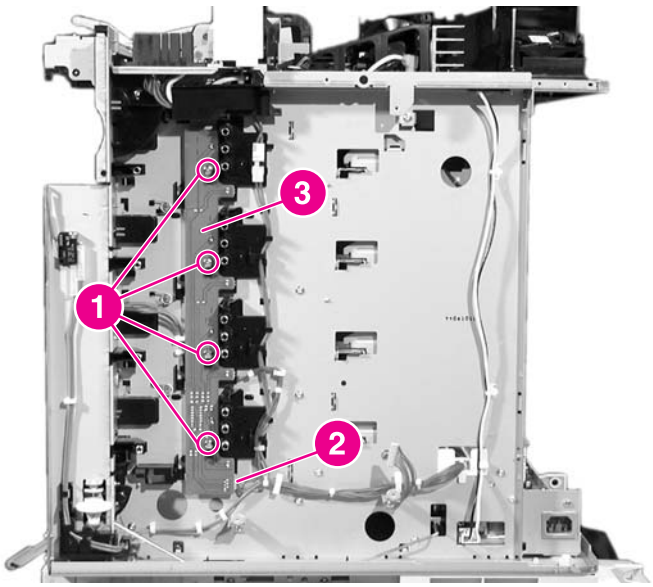


Figure 6-68. **Removing and replacing the toner level detection PCB**

High-voltage contact blocks

Use the following steps to remove and replace the high-voltage contact blocks.

To remove the high-voltage contact blocks

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the right cover. See Right cover.
5. Remove the high-voltage power supply PCB. See To remove the high-voltage power supply PCB.
6. Remove the toner level detection PCB. See Toner level detection PCB.
7. Remove the screw shown in callout 1.
8. Unthread the wires from their guides, shown in callout 2.
9. Remove the high-voltage contact block, shown in callout 3.
10. Repeat for each of the four high-voltage contact blocks.

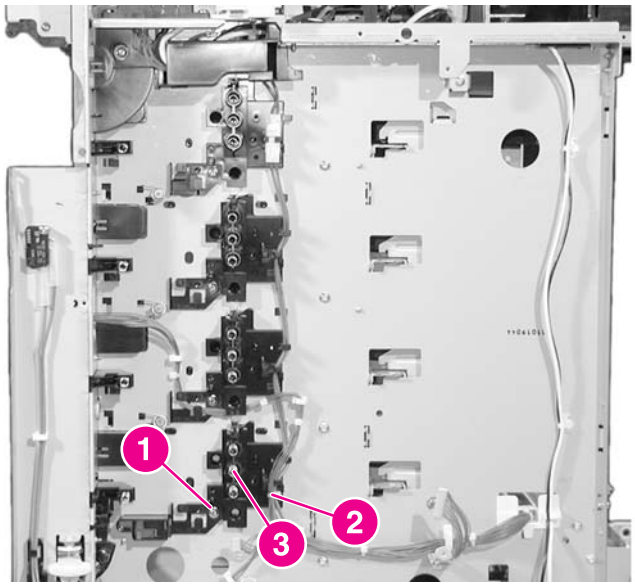


Figure 6-69. **Removing and replacing the high-voltage contact blocks (cyan indicated)**

Door switch

Use the following steps to remove the door switch.

To remove the door switch

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the right cover. See Right cover.
5. Remove the screw shown in callout 1.
6. Disconnect the connector shown in callout 2.
7. Remove the door switch.

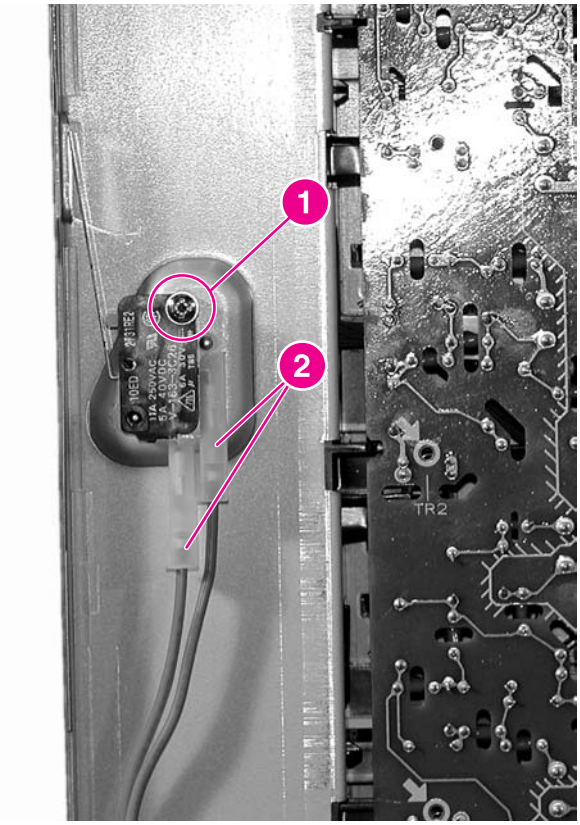


Figure 6-70. **Removing and replacing the door switch**

Internal components (top)

Use the following steps to remove and replace the top internal components of the printer.

Discharging PCB

Use the following steps to remove the discharging PCB.

To remove the discharging PCB

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the screw shown in callout 1 and remove the cover (for HP Color LaserJet 5550 models only).

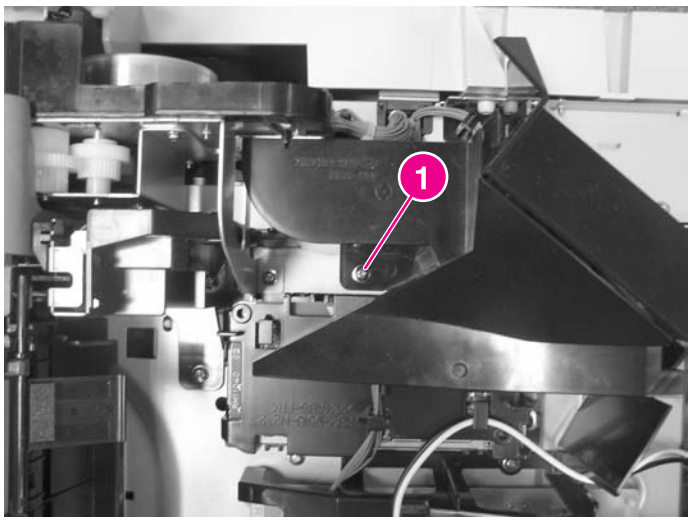


Figure 6-71. **Removing the screw in the discharging PCB**

5. Disconnect the connector shown in callout 2.
6. Remove the screw shown in callout 3.
7. Unhook the three tabs shown in callout 4, and unthread the cables from their guides.

8. Remove the discharging PCB.

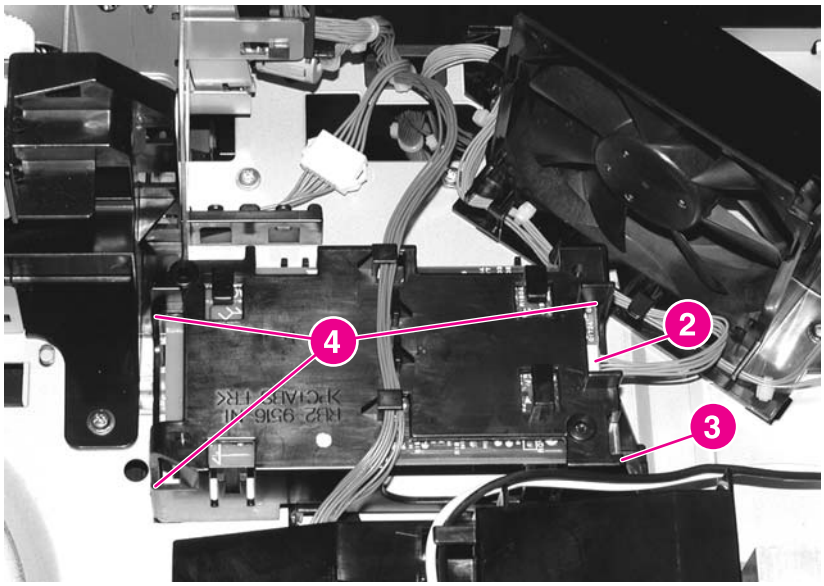


Figure 6-72. **Removing and replacing the discharging PCB**

Fuser power supply PCB

Use the following steps to remove the fuser power supply PCB.

To remove and replace the fuser power supply PCB

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Disconnect the connector shown in callout 1, and unthread the cable from the stay.
5. Unthread the cable shown in callout 2 from the fuser power supply cover.

6. Remove the screw shown in callout 3, and then remove the fuser power supply cover.

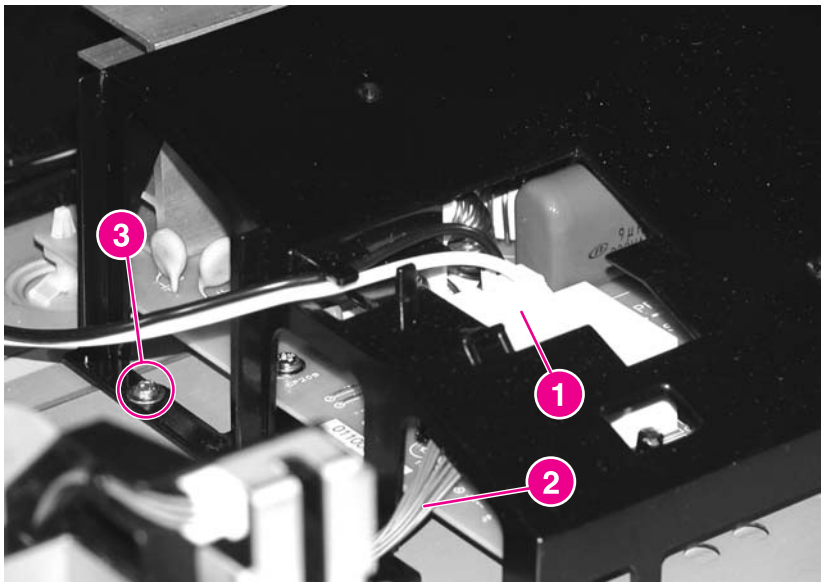


Figure 6-73. **Removing and replacing the fuser power supply PCB (1 of 2)**

7. Remove the two screws shown in callout 4.
8. Using needle-nose pliers, remove the four clips shown in callout 5.
9. Disconnect the four connectors shown in callout 6, and remove the fuser power supply PCB.

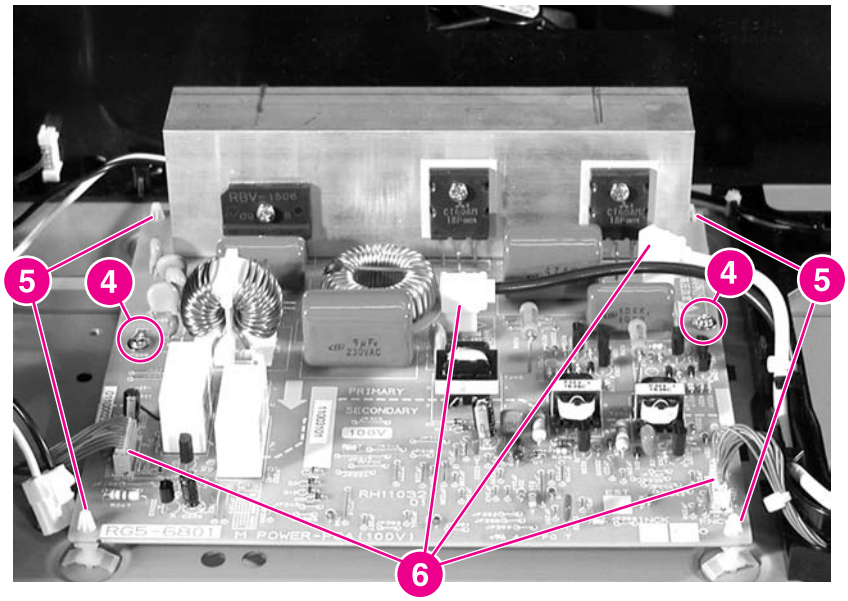


Figure 6-74. **Removing and replacing the fuser power supply PCB (2 of 2)**

Fuser drive unit

Use the following steps to remove the fuser drive unit.

To remove the fuser drive unit

1. Remove the fuser. See Replacing the fuser.
2. Remove the rear cover. See Rear cover.
3. Remove the top cover. See Top cover.
4. Remove the rear top cover. See Rear top cover.
5. Remove the left cover. See Left cover.
6. Remove the DC controller shield. See DC controller shield.
7. Remove the two screws shown in callout 1.
8. Remove the damper plate shown in callout 2, and remove the damper shown in callout 3.

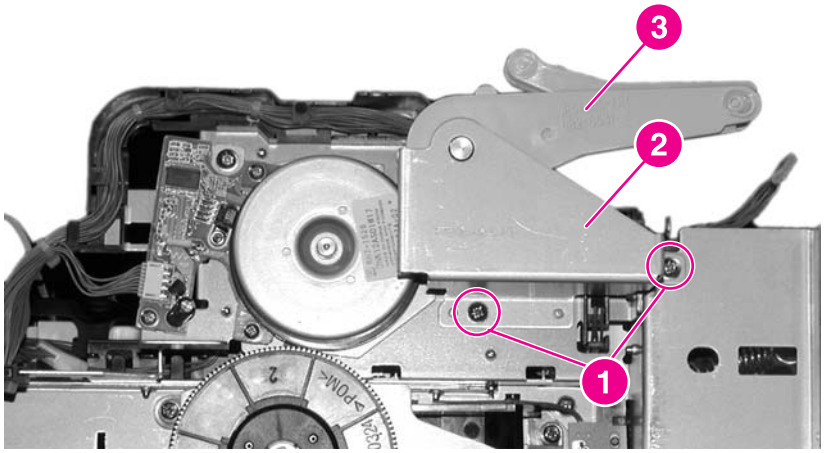


Figure 6-75. **Removing and replacing the fuser drive unit (1 of 4)**

9. Disconnect the four connectors (J1110, J1119, J1128, J1101) shown in callout 4.
10. Disconnect the intermediate connector shown in callout 5.

11. Remove the cable from the cable guide shown in callout 6.

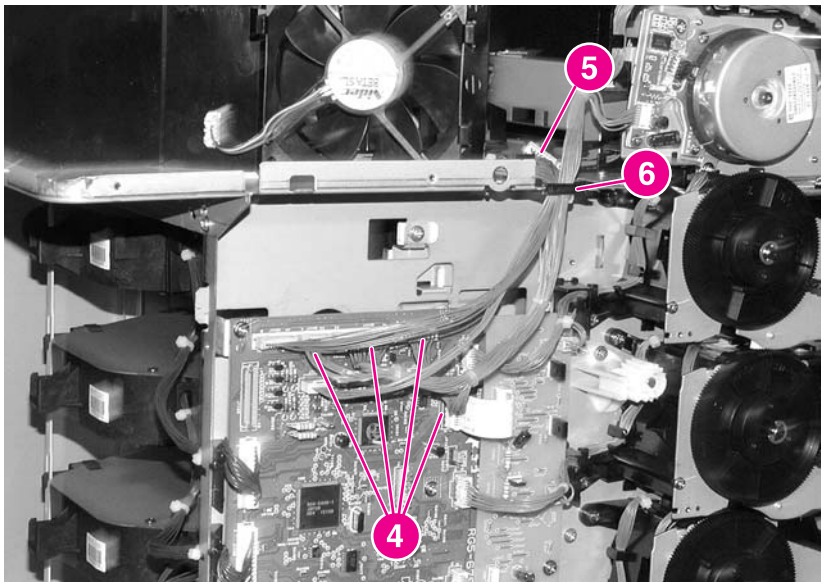


Figure 6-76. **Removing and replacing the fuser drive unit (2 of 3)**

12. Disconnect the two connectors on the color registration detection unit and the control panel (callout 7).

13. Remove the three screws shown in callout 8, and remove the fuser drive unit (callout 9).

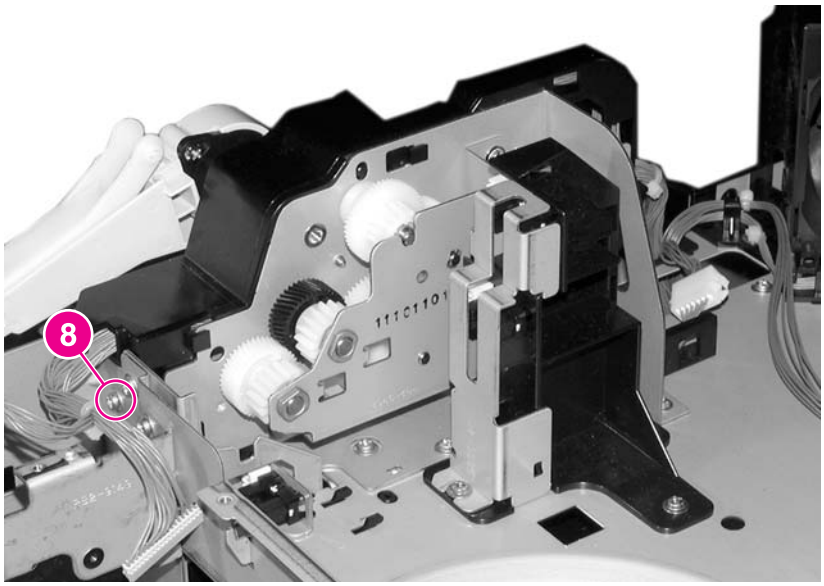


Figure 6-77. **Removing and replacing the fuser drive unit (3 of 4)**

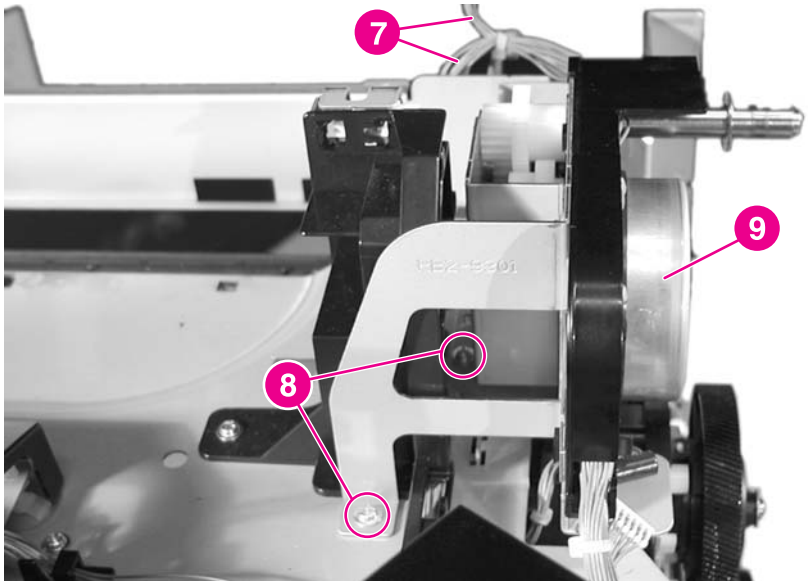


Figure 6-78. **Removing and replacing the fuser drive unit (4 of 4)**

Fuser inlet paper sensor

Use the following steps to remove the fuser inlet paper sensor.

To remove the fuser inlet paper sensor

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the fuser. See Replacing the fuser.
5. Disconnect the connector shown in callout 1.
6. Unhook the two tabs that are closest to the connector, shown in callout 2.
7. Remove the fuser paper sensor.

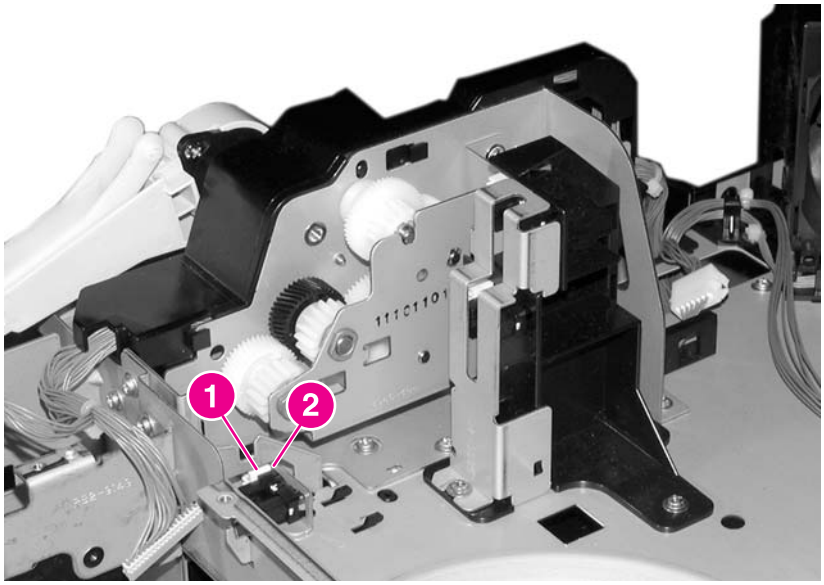


Figure 6-79. **Removing and replacing the fuser paper sensor**

Fuser delivery sensor and output bin full sensor

Use the following steps to remove the fuser delivery sensor and the output bin full sensor.

To remove the fuser delivery sensor and output bin full sensor

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Remove the fuser. See Replacing the fuser.
5. Remove the screw shown in callout 1.
6. Unhook the tab on the side of the sensor cover shown in callout 2.

7. Remove the sensor cover shown in callout 3.

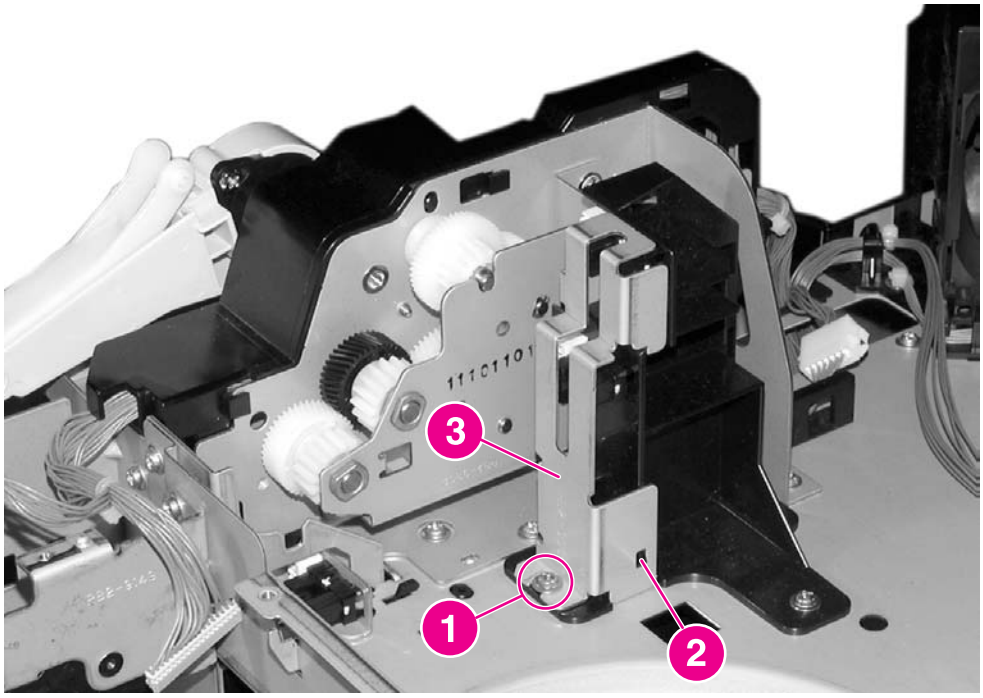


Figure 6-80. **Removing and replacing the fuser delivery sensor and output bin full sensor (1 of 2)**

8. For the fuser delivery sensor, disconnect the connector shown in callout 4, unhook the two tabs that are closest to the connector, and remove the fuser delivery sensor, shown in callout 5.
9. For the output bin full sensor, disconnect the connector shown in callout 6, unhook the two tabs that are closest to the connector, and remove the output bin full sensor, shown in callout 7.

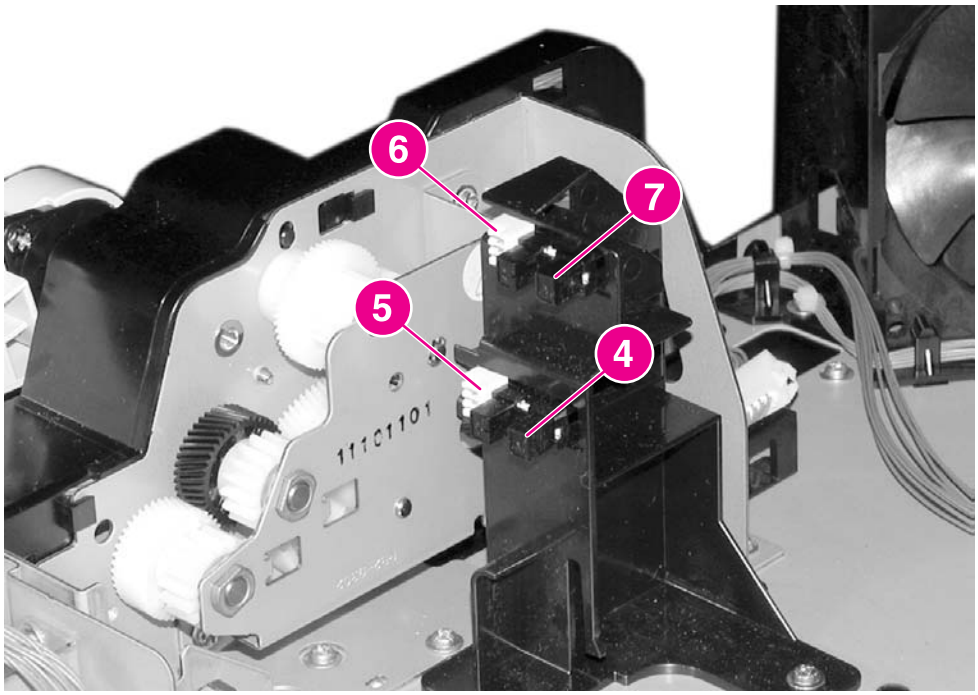


Figure 6-81. **Removing and replacing the fuser delivery sensor and output bin full sensor (2 of 2)**

Static discharge comb

Use the following steps to remove the static discharge eliminator unit.

To remove the static discharge comb (HP Color LaserJet 5500 models)

1. Remove the fuser.
2. Remove the two screws shown in callout 1.
3. Remove the static discharge comb.

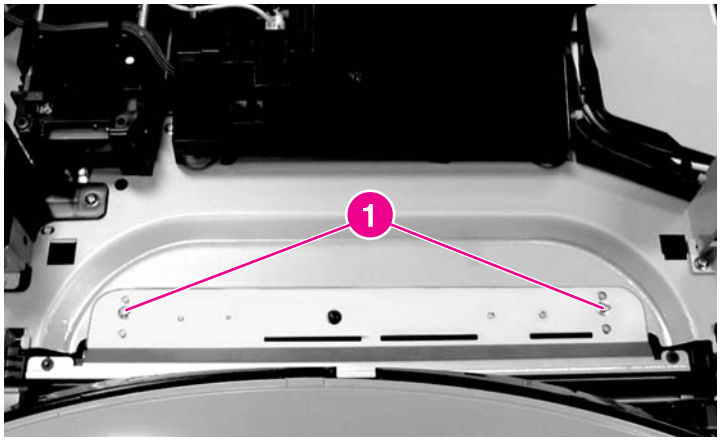


Figure 6-82. **Removing and replacing the static discharge comb**

To remove the static discharge eliminator unit (HP Color LaserJet 5550 models)

1. Remove the fuser.
2. Turn the release lever in callout 1 in the direction of the down arrow.
3. Lift the static eliminator unit in callout 2 straight up and remove it.

NOTE Be sure to cover the control panel with a cloth when replacing the static eliminator unit. Otherwise, toner adhered to the static charge eliminator may contaminate the control panel.

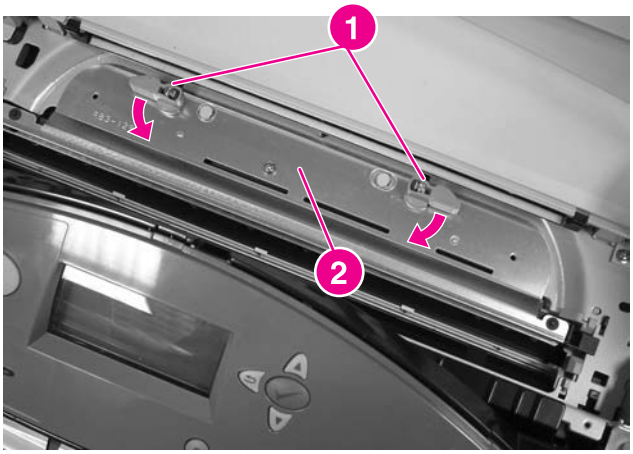


Figure 6-83. **Removing and replacing the static discharge eliminator unit (HP Color LaserJet 5550 models only)**

Formatter fan

Use the following steps to to remove and replace the formatter fan.

Removing/Replacing the formatter fan

NOTE The formatter fan is the horizontal, rear-most fan.

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Disconnect the connector shown in callout 1.
5. Remove the three screws shown in callout 2.
6. Unhook the two tabs shown in callout 3.
7. Remove the fan holder and the fan from the printer.
8. Remove the fan from the fan holder.

Reinstallation tip

When reinstalling the formatter fan, be sure that the arrow marked on the fan holder and the arrow marked on the fan are pointing in the same direction.

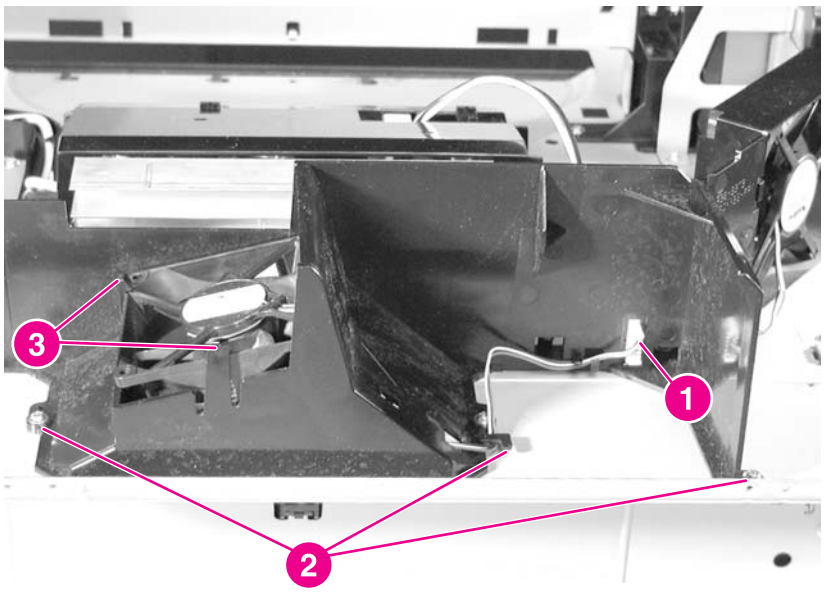


Figure 6-84. **Removing and replacing the formatter fan**

Cartridge fan

Use the following steps to remove and replace the cartridge fan.

To remove the cartridge fan

NOTE The cartridge fan is the vertical, front-most fan.

1. Remove the rear cover. See Rear cover.
2. Remove the top cover. See Top cover.
3. Remove the rear top cover. See Rear top cover.
4. Disconnect the connector shown in callout 1.
5. Unhook the three tabs shown in callout 2.
6. Remove the fan from the fan holder.

Reinstallation tip

When reinstalling the cartridge fan, be sure that the arrow marked on the fan holder and the arrow marked on the fan are pointing in the same direction.

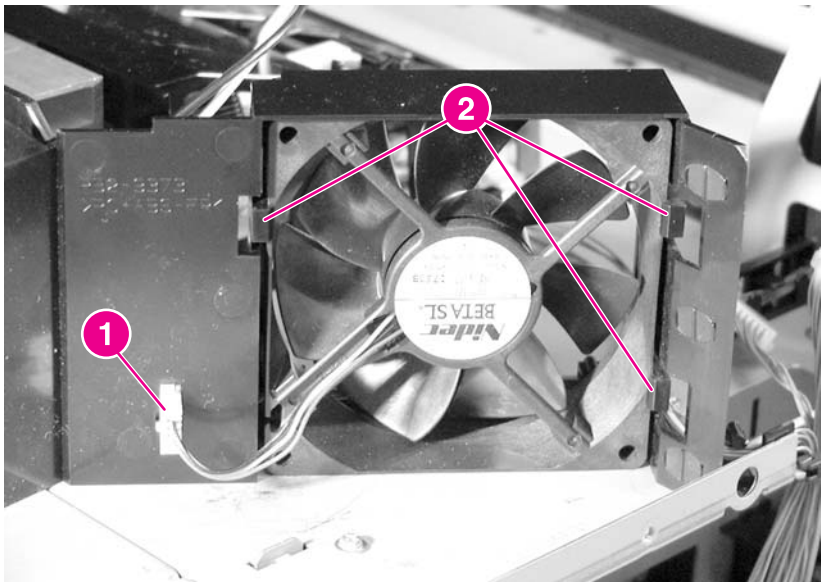


Figure 6-85. **Removing and replacing the cartridge fan**

Optional 500-sheet paper feeder

The optional 500-sheet paper feeder is designed so that you can access its components without removing the printer. The major components are located along the sides of the paper feeder.

Paper feeder left cover

Use the following steps to remove the paper feeder left cover.

To remove the 500-sheet paper feeder left cover

1. Remove the cassette.
2. Remove the screw shown in callout 1, and remove the front left cover shown in callout 2.

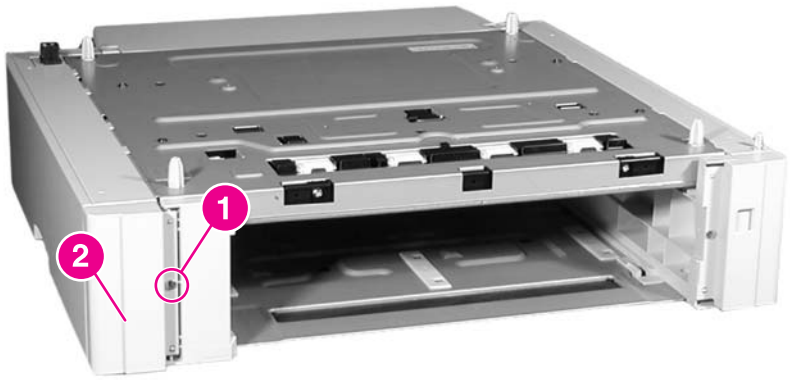


Figure 6-86. **Removing and replacing the 500-sheet paper feeder left cover (1 of 2)**

3. Remove the two screws shown in callout 3, and slide the left cover toward the back to remove it. (One screw is on the front of the paper feeder, underneath the cover you removed in step 2.)

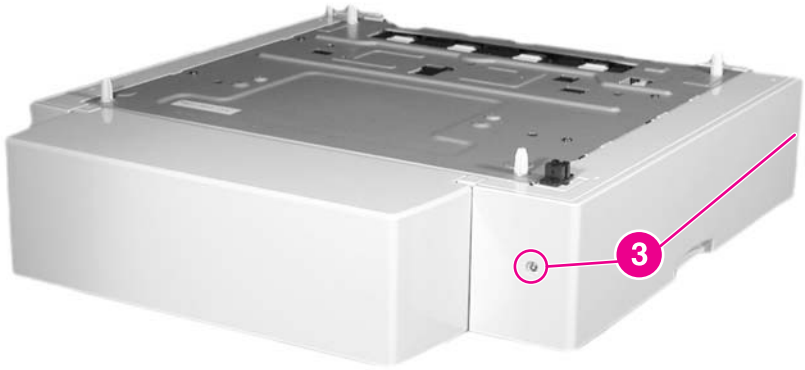


Figure 6-87. **Removing and replacing the 500-sheet paper feeder left cover (2 of 2)**

Paper feeder right cover

Use the following steps to remove the paper feeder right cover.

To remove the 500-sheet paper feeder right cover

1. Remove the cassette.
2. Remove the screw shown in callout 1, and remove the right front cover shown in callout 2.

Figure 6-88. **Removing and replacing the 500-sheet paper feeder right cover (1 of 2)**

3. Remove the two screws shown in callout 3, and slide the left cover toward the back to remove it. (One screw is on the front of the paper feeder, underneath the cover you removed in step 2.)

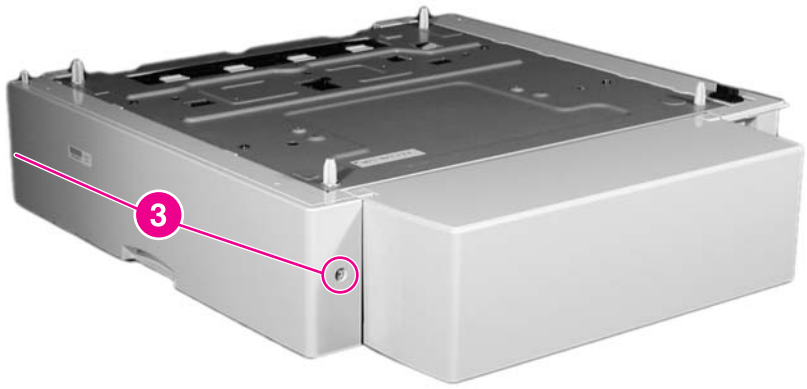


Figure 6-89. **Removing and replacing the 500-sheet paper feeder right cover (2 of 2)**

Paper feeder pickup and feed rollers

The procedure for removing the 500-sheet paper feeder pickup and feed rollers is essentially the same as for the cassette (Tray 2) pickup rollers. See To remove the paper pickup and feed rollers for instructions.

Paper feeder separation roller

The procedure for removing the 500-sheet feeder separation roller is essentially the same as for the cassette (Tray 2) separation roller. See To remove the cassette separation roller for instructions.

Paper feeder pickup unit

Use the following steps to remove the paper feeder pickup unit.

To remove the paper feeder pickup unit

1. Remove the paper feeder left cover and right cover. See Paper feeder left cover and Paper feeder right cover.

2. On the left side of the paper feeder, disconnect the two connectors shown in callout 1, and remove the cables from the cable clip.

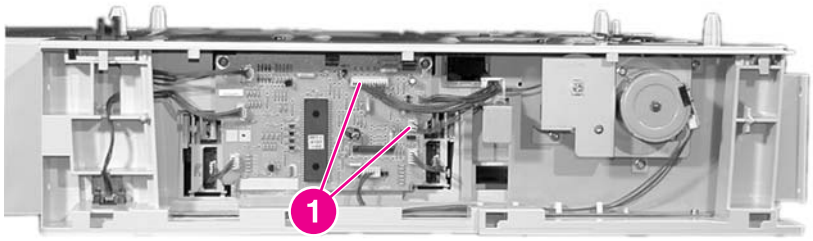


Figure 6-90. **Removing and replacing the paper feeder pickup unit (1 of 3)**

3. On the right side of the paper feeder, disconnect the two connectors shown in callout 2, and remove the cables from the cable guides.

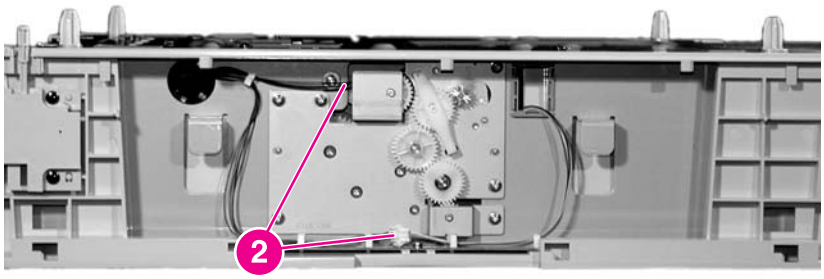


Figure 6-91. **Removing and replacing the paper feeder pickup unit (2 of 3)**

4. At the front of the paper feeder, remove the two screws shown in callout 3.

5. Slide the pickup unit forward, then push it down to remove it.

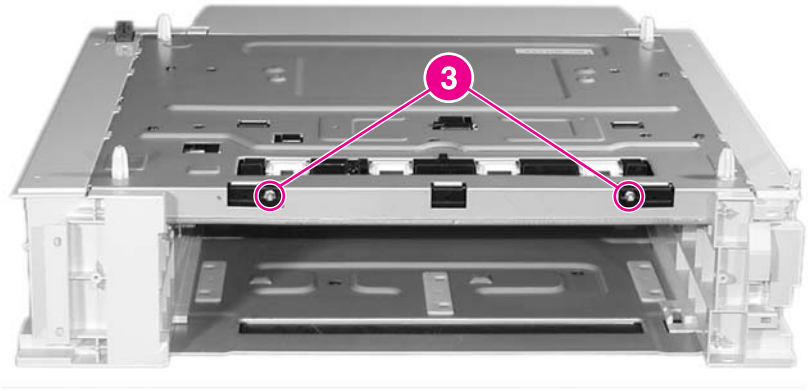


Figure 6-92. **Removing and replacing the paper feeder pickup unit (3 of 3)**

Reinstallation tip

Remove the paper cassette that is above the paper feeder pickup unit that you are reinstalling. While inserting the pickup unit, lift up on the pickup roller to help the pickup unit seat properly.

Paper feeder lifter drive unit

Use the following steps to remove the paper feeder lifter drive unit.

To remove the 500-sheet paper feeder lifter drive unit

1. Remove the paper feeder right cover. See Paper feeder right cover.
2. Disconnect the two connectors shown in callout 1, and remove the cables from the cable clip.

3. Remove the six screws shown in callout 2, and pull out the lifter drive unit.

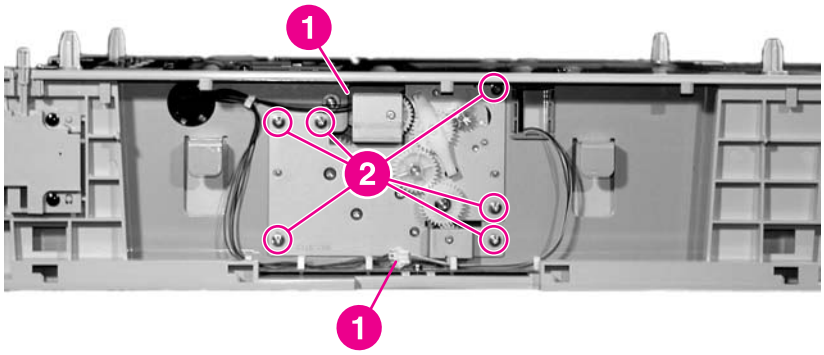


Figure 6-93. **Removing and replacing the paper feeder lifter drive unit**

Paper feeder length and width detection switches

The paper length and width detection switches are located on the left side of the paper feeder, next to the paper feeder PCB. The length detection switch is towards the rear of the paper feeder, and the width detection switch is toward the front.

To remove the paper feeder length and width detection switches

1. Remove the paper feeder left cover. See Paper feeder left cover.
2. Disconnect the connectors shown in callout 1.
3. Unhook the tabs on either side of both switches.
4. Remove the length detection switch, shown in callout 2, by pushing it into the cassette cavity.

5. Remove the width detection switch, shown in callout 3, by pushing it into the cassette cavity.

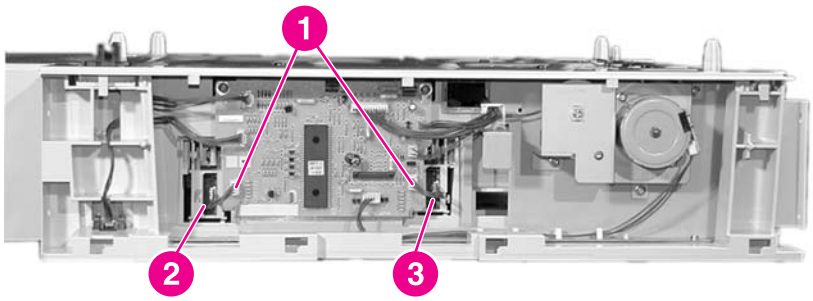


Figure 6-94. **Removing and replacing the paper feeder length and width detection switches**

Paper feeder pickup clutch

Use the following steps to remove the paper feeder pickup clutch.

To remove the paper feeder pickup clutch

1. Remove the paper feeder left cover. See Paper feeder left cover.
2. Disconnect the connector shown in callout 1.
3. Remove the three screws shown in callout 2, and remove the pickup motor mount.
4. Disconnect the connector shown in callout 3, and remove the pickup clutch (callout 4).

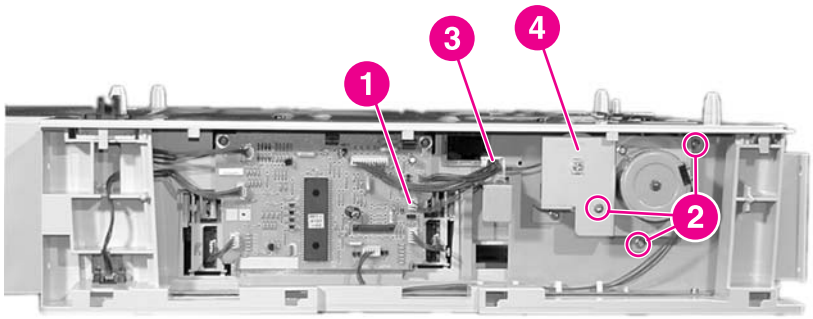


Figure 6-95. **Removing and replacing the paper feeder pickup clutch**

Paper feeder PCB

Use the following steps to remove the paper feeder PCB.

To remove the 500-sheet paper feeder PCB

1. Remove the paper feeder left cover. See Paper feeder left cover.
2. Disconnect the seven connectors shown in callout 1.
3. Remove the two screws shown in callout 2.
4. Remove the paper feeder PCB.

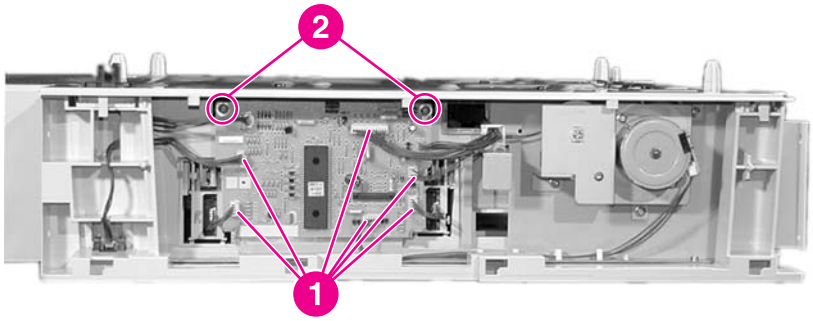


Figure 6-96. **Removing and replacing the 500-sheet paper feeder PCB**

7 Troubleshooting

NOTE Use this information in conjunction with the English service manual. The English service manual contains additional information that is not included in this translation.

The troubleshooting chapter contains the information listed below to help resolve printing problems.

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Introduction

This troubleshooting chapter assumes the reader has a basic understanding of the color laser printing process. Explanations of each mechanical assembly, printer systems, and the basic theory of operation are found in Chapter 5. Do not perform any of these troubleshooting processes without fully understanding the function of each mechanism.

This chapter contains the following sections:

- **Troubleshooting process** includes a pre-troubleshooting checklist and a troubleshooting flowchart. These tools contain information about common printer errors that can inhibit proper operation or create print quality problems. These tools also include recommendations for solving the cause of the error.
- **Printer error troubleshooting** explains each control panel display message and suggests recommendations for clearing the cause of each message. When the printer message indicates a failure for which the root cause is not obvious, use the printer error troubleshooting section and the troubleshooting tools section found later in this chapter to solve the problem.
- **Paper path troubleshooting** provides techniques to solve feed problems. Explanations regarding print media checks, troubleshooting jams, and the differences between jams caused by media and those caused by the printer are discussed.
- **Image formation troubleshooting** suggests methods for solving print quality problems.
- **Interface troubleshooting** provides techniques for isolating communication problems to the printer hardware, printer configuration, network configuration, or software application.
- **Control panel troubleshooting** provides procedures for printing a menu map from the printer control panel. It also describes the control panel menus, the items within each menu, and the possible values for the menu items.
- **Troubleshooting tools** help isolate the cause of printer failures. This section includes explanations of the printer configuration page and the event log.
- **Diagnostics** provides instructions on how to access and use the diagnostic tools incorporated into the printer.
- **Service menu** provides procedures for entering the service menu and performing service-oriented tasks. These tasks include counts for entering the serial number, service ID, transfer unit maintenance, fuser maintenance, color page, total page, and clearing the event log.
- **Diagrams** provides graphical locations and tables for the printer's internal assemblies and sensors.

Troubleshooting process

When the printer malfunctions or encounters an unexpected situation, the printer control panel alerts you of the situation. This section contains a pre-troubleshooting checklist to filter out many possible causes of the problem. A troubleshooting flowchart helps you diagnose the root cause of the problem. The remainder of this chapter provides steps for correcting problems.

- Use the pre-troubleshooting checklist to evaluate the source of the problem and to reduce the number of steps required to fix the problem.
- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The flowchart guides you to the appropriate section of this chapter that provides steps for correcting the malfunction.

Before beginning any troubleshooting procedure, check the following:

- Are supply items within their rated life?
- Does the configuration page reveal any configuration errors?

NOTE The customer is responsible for checking supplies and for using supplies that are in good condition.

Pre-troubleshooting checklist

The list below describes basic questions to ask the customer to help quickly define the problem(s).

Table 7-1. Pre-troubleshooting checklist

Environment	• Is the printer installed on a solid, level surface? • Is the power supply voltage within ± 10 volts of the specified power source? • Is the power supply plug inserted in the printer and the outlet? • Is the operating environment within the specified parameters, as listed in Chapter 1 of this manual? • Is the printer exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials? • Is the printer exposed to direct sunlight?
Media	• Does the customer use only supported media? • Is the media in good condition (no curls, folds, etc.)? • Is the media stored correctly and within environmental limits?

Table 7-1. Pre-troubleshooting checklist (continued)

Input trays	• Is the amount of media in the tray within specifications? • Is the media set into the tray correctly? • Are the paper guides aligned with the paper? • Is the cassette properly installed in the printer?
Print cartridges	• Is each print cartridge properly installed?
ETB and fuser	• Are the ETB and fuser properly installed?
Covers	• Are the top cover and front cover closed?
Condensation	• Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the printer on for 10 to 20 minutes. • Was a print cartridge opened soon after being moved from a cold to a warm room? If so, allow the printer to sit at room temperature for one to two hours.
Miscellaneous	• Check for and remove any non-HP components (print cartridges, memory modules, and EIO cards) from the printer. • If hardware or software configuration has not changed, or the problem is not associated with any specific software, contact the Customer Care Center. • Remove the printer from the network, and ensure that the failure is associated with the printer before beginning troubleshooting. • For any print quality issues, calibrate the printer. See, Calibrate now (HP Color LaserJet 5500 models only), for instructions.

Troubleshooting flowchart

The flowchart on these two pages highlights the general processes to quickly isolate and solve printer hardware problems.

Each heading depicts a major troubleshooting step. A "yes" answer to the questions allows you to proceed to the next major step.

A "no" answer indicates that additional testing is needed. Proceed to the referenced section in this chapter, and follow the instructions. After completing this additional testing, proceed to the next major step in the troubleshooting flowchart.

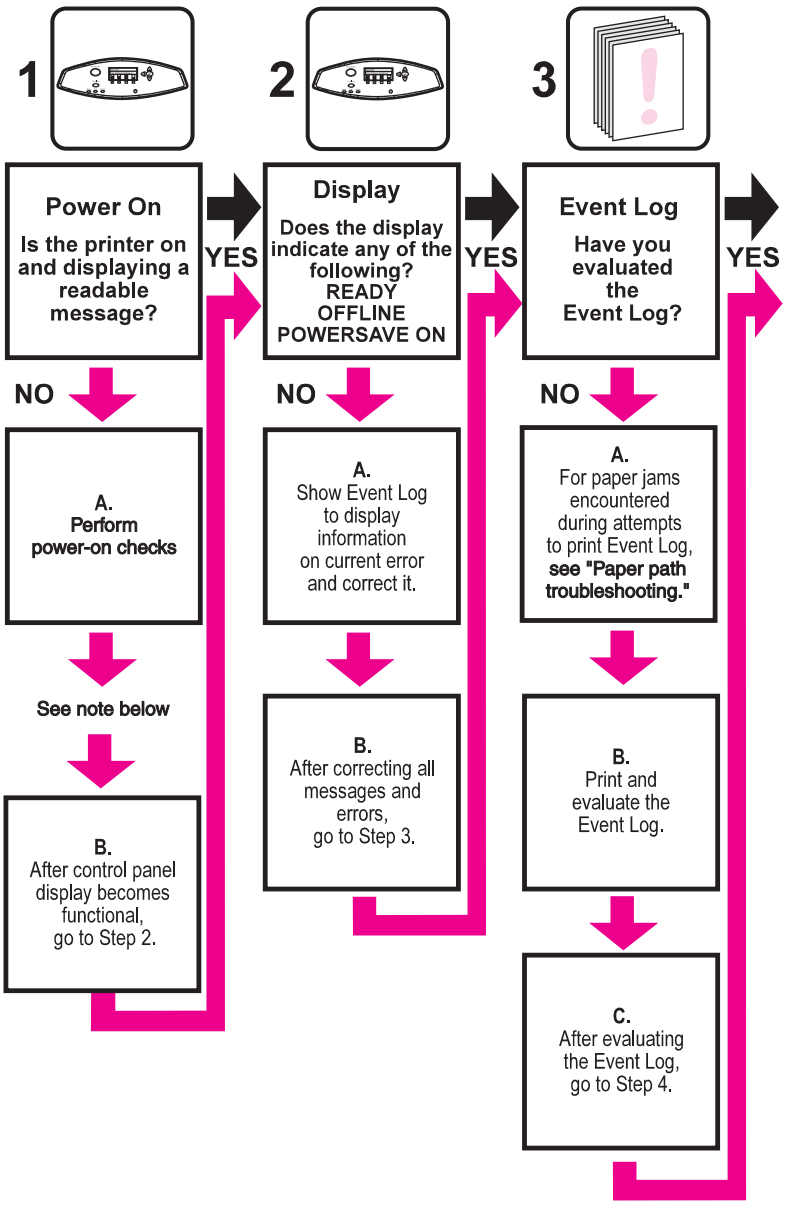


Figure 7-1. **Troubleshooting flowchart**

NOTE If the printer's display is blank, but the power-on checks pass, try printing an engine test page to determine whether the problem is with the engine/display or with the formatter. See Engine test page for instructions.

Troubleshooting flowchart (continued)

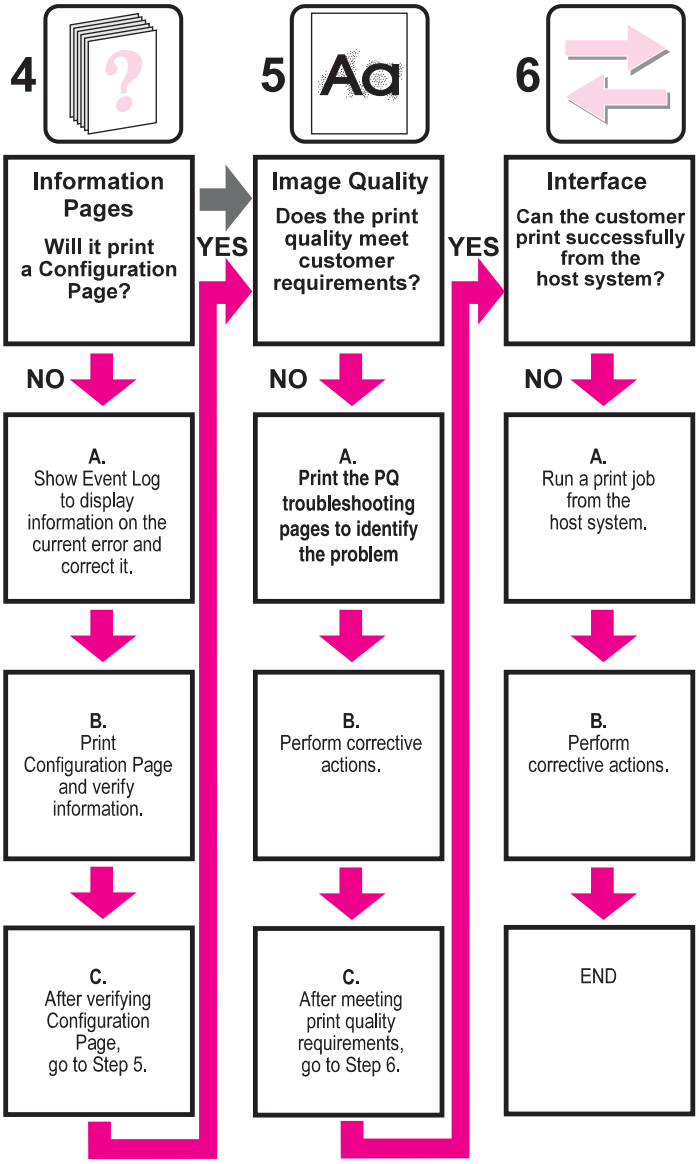


Figure 7-2. **Troubleshooting flowchart, continued**

Troubleshooting power-on

When you turn on the printer, if it does not make any sound or if the control panel display is blank, check the following items:

1. Verify that the printer is plugged into an active electrical outlet with the correct voltage.
2. Verify that the on/off switch is in the ON position.
3. Make sure the rear fan is running, indicating the system is operational.
4. Verify that the firmware DIMM and the formatter are seated and operating properly.
5. Remove any HP Jetdirect or other EIO cards, then try to turn the printer on again.
6. Make sure the control panel display is connected.

7. Check the fuses in the power supply.
8. If necessary, replace the power supply.
9. If necessary, replace the DC controller.

NOTE Check to be sure the green light, located in the middle of the formatter, is blinking.

Printer error troubleshooting

The following tables explain messages that might appear on the printer control panel. Alphabetical printer messages and their meanings are listed in Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) and Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models), The numerical printer messages are listed in Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) and Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models).

NOTE Not all messages are described in the tables; those messages that are not listed are self-explanatory.

Status messages

Status messages reflect the current state of the printer. They inform you of normal printer operation and require no interaction to clear them. They change as the state of the printer changes. Whenever the printer is ready, not busy, and has no pending warning messages, the status message **Ready** is displayed if the printer is online.

Warning messages

Warning messages inform you of data and print errors. These messages typically alternate with **Ready** or with status messages and remain displayed until the ✔ button is pressed. If **CLEARABLE WARNINGS** is set to **JOB** in the printer's configuration menu, these messages are cleared by the next print job.

Error messages

Error messages communicate that some action must be performed, such as adding paper or clearing a paper jam.

Some error messages are auto-continuable; if **AUTO CONTINUE=ON** the printer will continue normal operation after displaying an auto-continuable error message for 10 seconds.

NOTE Any button pressed during the 10-second display of an auto-continuable error message will override the auto-continue feature, and the function of the button pressed will take precedence. For example, pressing the CANCEL JOB button will cancel the job for the HP Color LaserJet 5500 or pressing the STOP button will cancel the job for the HP Color LaserJet 5550.

Critical error messages

Critical error messages inform you of a device failure. Some of these messages can be cleared by turning the printer off and then on. These messages are not affected by the auto continue setting. If a critical error persists, service is required.

Alphabetical printer messages

NOTE Many of the procedures in this section instruct you to replace the DC controller PCB, the ETB, the formatter, the drum drive motors, the drum drive gears, or a laser/scanner unit. After replacing one of these items, you must access the Print Quality menu and select **CALIBRATE NOW** to ensure proper print quality after the repair. See Calibrate now (HP Color LaserJet 5500 models only), for instructions on calibrating the printer. When the ETB or the fuser are replaced before their normal end of life, access the resets menu and reset the counter to zero.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models)

Control panel message	Event log error message	Description	Recommended action
If no paper in tray: **MANUALLY FEED** **<TYPE> <SIZE>** **For help press ?** alternates with **MANUALLY FEED** **<TYPE> <SIZE>** **To use another** **tray press ✔**	None	A job sent requires a specific paper type and size that is not currently available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
Access Denied **MENUS LOCKED**	None	An attempt has been made to modify a menu item while the control panel security mechanism is enabled by the printer administrator. The message will disappear shortly, and the printer will return to **Ready** state.	Contact the printer administrator to change settings.
CHOSEN PERSONALITY NOT AVAILABLE **For help press ?** alternates with **CHOSEN PERSONALITY NOT AVAILABLE** **To continue press ✔**	None	PJL encountered a request for a personality that did not exist in the printer. The job is aborted and no pages will be printed.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through the instructions.
CLOSE FRONT COVERS **For help press ?**	None	The covers need to be closed.	1. Press **?** for more information. 2. Close front covers. **NOTE** This message might also appear if the fuser is missing or incorrectly installed. Ensure that the fuser is correctly installed.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
CPR sensor out of range	None	The CPR Sensor is not behaving properly.	1. Force a calibration by selecting Calibrate Now from the Print Quality menu. See Calibrate now (HP Color LaserJet 5500 models only). 2. If the message persists, verify the cables are seated properly and the connectors J32 (on the color registration detection unit) and J1119 (on the DC controller) are making good contact. 3. If a laser/scanner unit has recently been replaced, make sure it has been installed properly. If it is installed properly, replace it again with a new one. 4. Replace the color registration detection unit. 5. If the message still persists, replace the DC controller PCB. Calibrate the printer after replacing the DC controller.
DATA RECEIVED **Print last page?**	None	The printer received data and is waiting for a form feed. When the printer receives another file, the message should disappear.	Press ✔ to continue.
DETECTABLE SIZE **For help press ?** alternates with **DETECTABLE SIZE** **Recommend move** **switch to STANDARD**	None	A tray has been loaded with paper that is a standard size and the switch in the tray is set to custom.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
DISK DEVICE **FAILURE** alternates with **Ready** **For menus press ✔**	None	A device failure has occurred on the specified drive.	1. Printing may continue for jobs that do not require access to the disk drive. 2. To clear the message, turn the printer off and then back on. 3. If the message persists, remove and re-install the EIO disk drive. 4. If the message persists, replace the EIO disk drive.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
DISK FILE **OPERATION FAILED** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to perform an illogical operation (for example, to download a file to a non-existent directory).	1. Printing may continue. 2. Turn the printer off and then back on. 3. If the message reappears, there may be a problem with the software application.
DISK FILE **SYSTEM IS FULL** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system is full.	1. Use the HP Web Jetadmin software to delete files from the EIO disk drive and try again. 2. To remove this message from the display, turn the printer off and then back on.
DISK IS **WRITE PROTECTED** alternates with **Ready** **For menus press ✔**	None	The file system device is protected and no new files can be written to it.	1. To enable writing to the disk, turn off write protection, using HP Web Jetadmin. 2. To remove this message from the display, turn the printer off and then back on.
DOORS OPEN **TEST ABORTED**	None	A printer door has been opened during a test. The test has been aborted.	Close the door, and restart the test.
EIO DISK X **NOT FUNCTIONAL** **For help press ?**	None	The EIO disk in slot X is not working correctly.	Remove the EIO disk from the slot indicated and replace with a new EIO disk drive.
FLASH DEVICE **FAILURE** alternates with **Ready** **For menus press ✔**	None	A device failure has occurred on the specified drive.	1. Printing may continue for jobs that do not require the Flash DIMM. 2. To remove this message from the display, turn the printer off and then back on. 3. If the message persists, remove and re-install the Flash DIMM. 4. If the message persists, replace the Flash DIMM.
FLASH FILE **OPERATION FAILED** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to perform an illogical operation (for example, to download a file to a non-existent directory).	1. Printing may continue. 2. Turn the printer off and then back on. 3. If the message reappears, there may be a problem with the software application.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
FLASH FILE **SYSTEM IS FULL** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system is full.	1. Use HP Web Jetadmin software to delete files from the flash memory and try again. 2. To remove this message from the display, turn the printer off and then back on.
FLASH IS **WRITE PROTECTED** alternates with **Ready** **For menus press ✔**	None	The file system device is protected and no new files can be written to it.	1. To enable writing to the flash memory, turn off write protection, using HP Web Jetadmin. 2. To remove this message from the display, turn the printer off and then back on.
INCORRECT <COLOR> CARTRIDGE alternates with **For status press ✔**	None	An incorrect cartridge is installed in a slot and the cover is closed.	1. Press ✔ and then press **?** for help. 2. Press ▲ and ▼ to step through the instructions.
Incorrect PIN	None	The wrong PIN was entered.	Re-enter PIN correctly. After three incorrect PIN entries, the printer will return to **Ready**.
INCORRECT SUPPLIES **For status press ✔**	None	At least one supply item is incorrectly positioned in the printer and another supply item is missing, incorrectly placed, out, or low.	1. Press ✔ and then press **?** for help. 2. Follow the instructions on the display to locate and replace the incorrect supply. 3. Press ▲ and ▼ to step through the instructions.
INSERT OR CLOSE **TRAY X** **For help press ?**	None	Tray XX must be inserted or closed before the current job can be printed.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
INSTALL <COLOR> **CARTRIDGE** alternates with **For help press ?**	None	The cartridge is either not installed or not correctly installed in the printer.	1. Insert the cartridge or make sure the cartridge is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, replace the cartridge. 5. Verify that the connectors between the memory tag antenna, memory controller board, and the DC controller are seated properly. 6. Replace the antenna PCB for the indicated color. 7. Replace the memory controller PCB. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
INSTALL FUSER **For help press ?**	None	The fuser is either not installed or not correctly installed in the printer.	1. Insert the fuser or make sure the installed fuser is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, verify that the connectors J18 (on the fuser) and J1101 (on the DC controller) are good; replace them if necessary. 5. Replace the fuser assembly. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
INSTALL SUPPLIES **For status press ✔**	None	At least one supply item is missing or is not correctly seated in the printer and another supply item is missing, incorrectly placed, out, or low. Insert the supply item or make sure the installed supply item is fully seated.	1. Press ✔ and then press **?** for help. 2. Follow the instructions on the display to locate and replace the missing or incorrect supply. 3. Press ▲ and ▼ to step through the instructions.
INSTALL TRANSFER **UNIT** **For help press ?**	None	The transfer unit is either not installed or not correctly installed in the printer.	1. Insert the transfer unit or make sure the installed transfer unit is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, verify that the ETB connectors (J36 and J38 on the ETB and J1111 on the DC controller PCB) are good. Replace connectors as necessary. 5. Replace the ETB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
LOAD TRAY X **<TYPE> <SIZE>** **For help press ?**	None	Tray XX is either empty or configured for a type and size other than specified in the job. No other tray is available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
LOAD TRAY X **<TYPE> <SIZE>** **For help press ?** alternates with **LOAD TRAY X** **<TYPE> <SIZE>** **To use another** **tray press ✔**	None	Tray XX is either empty or configured for a type and size other than specified in the job.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
MANUALLY FEED **<TYPE> <SIZE>** **For help press ?** alternates with **MANUALLY FEED** **<TYPE> <SIZE>** **To continue press ✔**	None	A job sent requires a specific paper type and size that is not currently available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
NON HP CARTRIDGE **IN USE** alternates with **Ready** **For menus press ✔**	None	The printer has detected that a non-HP print cartridge is currently installed.	If you believe the cartridge is an HP cartridge, please call the HP fraud hotline at 1-877-219-3183. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty.
NON HP CARTRIDGE DETECTED	None	A new cartridge has been installed that is not made by HP. This message is displayed until an HP cartridge is installed or CANCEL JOB is pressed.	If you believe the cartridge is an HP cartridge, call the HP fraud hotline at 1-877-219-3183. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty. To continue printing, press CANCEL JOB. The first pending job will be cancelled.
ORDER <COLOR> **CARTRIDGE** alternates with **To continue press ✔**	None	The identified print cartridge is nearing the end of its useful life and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP. Override by pressing ✔.	1. Order the identified print cartridge. 2. Press ✔ to continue. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
ORDER <COLOR> **CARTRIDGE** alternates with **XXXX PAGES LEFT**	None	The identified print cartridge is near end of life. The printer is ready and will continue for the estimated number of pages indicated.	1. Order the identified print cartridge. 2. Estimated pages remaining is based upon historical page coverage of this printer. 3. Printing will continue until **REPLACE <COLOR> CARTRIDGE** is shown. 4. Press **?** for detailed information. 5. Press ▲ and ▼ to step through instructions. 6. Supplies ordering information is also available from the embedded Web server.
ORDER FUSER KIT **XXXX PAGES LEFT** **For menus press ✔**	None	The fuser is near end of life. The printer is ready and will continue for the estimated number of pages indicated.	1. Order the image fuser kit. 2. Printing can continue until the fuser reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
ORDER FUSER KIT **XXXX PAGES LEFT** **To continue press ✔**	None	The fuser is near end of life and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP.	1. Order the image fuser kit. 2. Press ✔ to continue printing. Printing can continue until the fuser reaches end of life. 3. Supplies ordering information is also available from the embedded Web server.
ORDER SUPPLIES **For menus press ✔**	None	More than one supply item is low.	1. Press ✔ to identify which supplies should be ordered. 2. Order the identified supplies. 3. Printing can continue until supplies reach end of life. 4. Press **?** for detailed information. 5. Press ▲ and ▼ to step through instructions. 6. Supplies ordering information is also available from the embedded Web server.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
ORDER SUPPLIES **For status press ✔**	None	More than one supply item is low and the SUPPLIES LOW setting is set to STOP.	1. Press ✔ to identify which supplies should be ordered. 2. Order the identified supplies. 3. Press ✔ twice to continue printing. Printing can continue until supplies reach end of life. 4. Supplies ordering information is also available from the embedded Web server.
ORDER TRANSFER KIT **XXXX PAGES LEFT** **For menus press ✔**	None	The transfer unit is near end of life.	1. Order an image transfer kit. 2. Printing can continue until the transfer unit reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
ORDER TRANSFER KIT **XXXX PAGES LEFT** **To continue press ✔**	None	The number of pages remaining for the transfer unit has reached the low threshold and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP.	1. Order the transfer kit. 2. Printing can continue until the transfer unit reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
Output Bin Full **Remove all paper** **from bin**	None	The output bin is full and must be emptied for printing to continue.	Remove media from the output bin.
Performing... **PAPER PATH TEST**	None	The printer is performing a Paper Path test.	No action is necessary; however, the data is useful to help troubleshoot paper jams.
Printing... **PQ troubleshooting**	None	The printer is generating the print quality troubleshooting pages. The printer will return to the **Ready** state when the pages are printed.	Follow the instructions on the printed pages.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Printing... **REGISTRATION PAGE**	None	The printer is generating the registration page. The printer will return to the **SET REGISTRATION** menu when the page is completed.	Follow the instructions on the printed pages.
Processing duplex job **Do not grab paper** **until job completes**	None	Paper temporarily comes into the output bin while printing a duplex job. Do not attempt to remove the pages until the job is complete.	Do not grab paper as it temporarily comes into the output bin. The message will disappear when the job is finished.
Receiving **upgrade**	None	A firmware upgrade is in progress.	Do not turn the printer off until the printer returns to **Ready**.
REINSTALL <COLOR> CARTRIDGE alternates with **For help press ?**	None	The cartridge is not fully seated.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
REINSTALL SUPPLIES alternates with **For status press ✔**	None	One or more cartridges are not fully seated.	1. Press ✔ to display which cartridges are not fully seated. 2. Follow the instructions on the display to reinstall the cartridge(s). 3. Press ▲ and ▼ to step through instructions.
REMOVE ALL **PRINT CARTRIDGES** **To exit press** **the STOP key**	None	The printer is executing a Component test and the component selected is Belt only.	Remove all print cartridges.
REMOVE AT LEAST ONE **CARTRIDGE** **To exit press** **the STOP key**	None	The printer is executing a Disable cartridge check or Component test where the component selected is Cartridge Motor.	Remove one print cartridge.
REPLACE <COLOR> **CARTRIDGE** alternates with **For help press ?**	None	The identified print cartridge has reached the end of life. Printing will not continue until the cartridge is replaced.	1. Replace the identified print cartridge to continue printing. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
REPLACE FUSER KIT	None	The fuser kit is at end of life.	1. Replace the fuser to continue printing. 2. Press ? for detailed information. 3. Press ▲ and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.
REPLACE SUPPLIES **For status press ✔**	None	At least one supply item is out and needs to be replaced and another supply item is either out or low.	1. Press ✔ to identify which supplies should be replaced. 2. Replace the identified supplies to continue printing. 3. Press ? for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
REPLACE TRANSFER KIT **For help press ?**	None	The transfer unit has reached end of life.	1. Replace the transfer unit to continue printing. 2. Press ? for detailed information. 3. Press ▲ and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.
Resend **upgrade**	None	The firmware upgrade was not completed successfully.	Attempt upgrade again.
Rotating <COLOR> **cartridge motor** **To exit press** **Cancel Job key**	None	A component test is in progress; the component selected is <color> Cartridge motor.	Press CANCEL JOB when ready to stop this test.
Rotating <COLOR> laser scanner **To exit press** **Cancel Job key**	None	A Scanner test is in progress.	Press CANCEL JOB when ready to stop this test.
Rotating motor **To exit press** **Cancel Job key**	None	The printer is testing the developing disengaging motor. (This motor is called the "alienation motor" in firmware messages.)	Press CANCEL JOB when ready to stop this test.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Rotating motor **To exit press** **Cancel Job key**	None	The printer is executing a Component Test and the component selected is Belt Only.	Press CANCEL JOB when ready to stop this test.
Rotating motor **To exit press** **Cancel Job key**	None	The printer is executing a Component test and the component selected is Fuser Motor.	Press CANCEL JOB when ready to stop this test.
Rotating... **transfer motors** **To exit press** **Cancel Job key**	None	The printer is executing a Component test and the component selected is Transfer Motors.	Press CANCEL JOB when ready to stop this test.
SIZE MISMATCH IN **TRAY X** **For help press ?** alternates with **Ready** **For menus press ✔**	None	The tray is loaded with media longer or shorter in the feed direction than the size configured for the tray.	1. Adjust the side and rear media guides against the paper. 2. If the media used is Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 by 17, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel. 3. Reset the paper size in the paper handling menu.
Tray X **<TYPE> <SIZE>** **Size detected by tray** alternates with **Tray X** **<TYPE> <SIZE>** **To change type** **press ✔**	None	The printer is reporting the current configuration of tray XX. The tray switch is in the STANDARD position.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 by 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the tray. 4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Tray X **<TYPE> <SIZE>** **Size specified by user** alternates with **Tray X** **<TYPE> <SIZE>** **To change type** **press ✔**	None	The printer is reporting the current configuration of tray XX. The tray switch is in the CUSTOM position.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 by 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, leave the tray switch in the CUSTOM position, adjust the media guides against the media, and close the tray. 4. Select the paper handling menu from the control panel. Configure the size for the tray.
TRAY X EMPTY **<TYPE> <SIZE>** alternates with **Ready** **For menus press ✔**	None	The specified tray is empty and needs to be filled but the current job does not need this tray to print correctly.	Refill the tray at a convenient time.
TRAY X OPEN **For help press ?** alternates with **Ready** **For menus press ✔**	None	The specified tray is open or not closed completely.	Close the tray.
TRAY X SIZE= **<XXXX SIZE>** **For help press ?** alternates with **TRAY X SIZE=** **<XXXX SIZE>** **To change, move** **switch in tray XX**	None	A non-detectable media size was selected from the menu and the tray switch is set to STANDARD. The size selected from the menu does not match the size detected by the tray. Size detection occurs when the tray switch is set in the STANDARD position.	1. Adjust the side and rear media guides against the paper. 2. If the media used is Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 by 17, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel. 3. Reset the paper size in the paper handling menu.

Table 7-2. Alphabetical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
TRAY XX CONTAINS **UNKNOWN MEDIA**	None	The media type in the specified tray cannot be determined.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 by 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the tray. 4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.
TYPE MISMATCH IN **TRAY XX= <TYPE>** alternates with **Ready** **For menus press ✔**	None	This warning appears after the printer has detected an overhead transparency in the paper path when the tray is configured for another type, resulting in a 41.5 Unexpected Type in Tray XX error. The user did not reconfigure the tray after the error message appeared, so the printer determines that the type of media is not what the tray is configured to hold.	To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select.
Unable To Store Job	None	A job cannot be stored because of a memory, disk, or configuration problem.	Install additional memory in the printer, or install a disk drive into the printer. If a disk drive is installed, delete previously stored print jobs.
USE INSTEAD? **TRAY XX: <TYPE>** **<SIZE>**	None	The printer is offering a selection of alternate media to use for the print job.	Highlight the media with ▲ and ▼. Press ✔ to select a choice.

NOTE Not all messages are described in the tables; those messages that are not listed are self-explanatory.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models)

Control panel message	Event log error message	Description	Recommended action
If no paper in tray: **Manually Feed** **<TYPE> <SIZE>** **For help press ?** alternates with **Manually Feed** **<TYPE> <SIZE>** **To use another** **tray press ✔**	None	A job sent requires a specific paper type and size that is not currently available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
Access Denied **MENUS LOCKED**	None	An attempt has been made to modify a menu item while the control panel security mechanism is enabled by the printer administrator. The message will disappear shortly, and the printer will return to **Ready** state.	Contact the printer administrator to change settings.
CHOSEN PERSONALITY **NOT AVAILABLE** **For help press ?** alternates with **CHOSEN PERSONALITY** **NOT AVAILABLE** **To continue press**	None	PJL encountered a request for a personality that did not exist in the printer. The job is aborted and no pages will be printed.	1. Press **?** for detailed information. 2. Press ▲ and ▼to step through the instructions.
CLOSE FRONT COVERS **For help press ?**	None	The covers need to be closed.	1. Press **?** for more information. 2. Close front covers. **NOTE** This message might also appear if the fuser is missing or incorrectly installed. Ensure that the fuser is correctly installed.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
CPR sensor out of range	None	The CPR Sensor is not behaving properly.	1. Force a calibration by selecting Calibrate Now from the Print Quality menu. See Calibrate now (HP Color LaserJet 5500 models only). 2. If the message persists, verify the cables are seated properly and the connectors J32 (on the color registration detection unit) and J1119 (on the DC controller) are making good contact. 3. If a laser/scanner unit has recently been replaced, make sure it has been installed properly. If it is installed properly, replace it again with a new one. 4. Replace the color registration detection unit. 5. If the message still persists, replace the DC controller PCB. Calibrate the printer after replacing the DC controller.
DATA RECEIVED **Print last page?**	None	The printer received data and is waiting for a form feed. When the printer receives another file, the message should disappear.	Press ✔ to continue.
DETECTABLE SIZE **IN TRAY X** **For help press ?** alternates with **DETECTABLE SIZE IN TRAY X** **Recommend move** **switch to STANDARD**	None	A tray has been loaded with paper that is a standard size and the switch in the tray is set to custom.	1. Press ? for detailed information. 2. Press ▲ and ▼ to step through instructions.
DISK DEVICE **FAILURE** alternates with **Ready** **For menus press ✔**	None	A device failure has occurred on the specified drive.	1. Printing may continue for jobs that do not require access to the disk drive. 2. To clear the message, turn the printer off and then back on. 3. If the message persists, remove and re-install the EIO disk drive. 4. If the message persists, replace the EIO disk drive.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
DISK DEVICE **FAILURE** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to perform an illogical operation (for example, to download a file to a non-existent directory).	1. Printing may continue. 2. Turn the printer off and then back on. 3. If the message reappears, there may be a problem with the software application.
DISK FILE OPERATION FAILED **SYSTEM IS FULL** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system is full.	1. Use the HP Web Jetadmin software to delete files from the EIO disk drive and try again. 2. To remove this message from the display, turn the printer off and then back on.
DISK IS **WRITE PROTECTED** alternates with **Ready** **For menus press ✔**	None	The file system device is protected and no new files can be written to it.	1. To enable writing to the disk, turn off write protection, using HP Web Jetadmin. 2. To remove this message from the display, turn the printer off and then back on.
DOORS OPEN **TEST ABORTED**	None	A printer door has been opened during a test. The test has been aborted.	Close the door, and restart the test.
EIO DISK X **NOT FUNCTIONAL** **For help press ?**	None	The EIO disk in slot X is not working correctly.	Remove the EIO disk from the slot indicated and replace with a new EIO disk drive.
FLASH DEVICE **EIO DISK X NOT FUNCTIONAL** alternates with **Ready** **For menus press ✔**	None	A device failure has occurred on the specified drive.	1. Printing may continue for jobs that do not require the Flash DIMM. 2. To remove this message from the display, turn the printer off and then back on. 3. If the message persists, remove and re-install the Flash DIMM. 4. If the message persists, replace the Flash DIMM.
FLASH FILE **OPERATION FAILED** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to perform an illogical operation (for example, to download a file to a non-existent directory).	1. Printing may continue. 2. Turn the printer off and then back on. 3. If the message reappears, there may be a problem with the software application.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
FLASH FILE **SYSTEM IS FULL** alternates with **Ready** **For menus press ✔**	None	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system is full.	1. Use HP Web Jetadmin software to delete files from the flash memory and try again. 2. To remove this message from the display, turn the printer off and then back on.
FLASH IS **WRITE PROTECTED** alternates with **Ready** **For menus press ✔**	None	The file system device is protected and no new files can be written to it.	1. To enable writing to the flash memory, turn off write protection, using HP Web Jetadmin. 2. To remove this message from the display, turn the printer off and then back on.
INCORRECT <COLOR> CARTRIDGE alternates with **For status press ✔**	None	An incorrect cartridge is installed in a slot and the cover is closed.	1. Press ✔ and then press **?** for help. 2. Press ▲ and ▼ to step through the instructions.
Incorrect PIN	None	The wrong PIN was entered.	Re-enter PIN correctly. After three incorrect PIN entries, the printer will return to **Ready**.
Incorrect supplies **For status press ✔**	None	At least one supply item is incorrectly positioned in the printer and another supply item is missing, incorrectly placed, out, or low.	1. Press ✔ and then press **?** for help. 2. Follow the instructions on the display to locate and replace the incorrect supply. 3. Press ▲ and ▼ to step through the instructions.
INSERT OR CLOSE **TRAY X** **For help press ?**	None	Tray XX must be inserted or closed before the current job can be printed.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
INSTALL <COLOR> **CARTRIDGE** alternates with **For help press ?**	None	The cartridge is either not installed or not correctly installed in the printer.	1. Insert the cartridge or make sure the cartridge is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, replace the cartridge. 5. Verify that the connectors between the memory tag antenna, memory controller board, and the DC controller are seated properly. 6. Replace the antenna PCB for the indicated color. 7. Replace the memory controller PCB. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
INSTALL FUSER **For help press ?**	None	The fuser is either not installed or not correctly installed in the printer.	1. Insert the fuser or make sure the installed fuser is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, verify that the connectors J18 (on the fuser) and J1101 (on the DC controller) are good; replace them if necessary. 5. Replace the fuser assembly. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
INSTALL SUPPLIES **For status press ✔**	None	At least one supply item is missing or is not correctly seated in the printer and another supply item is missing, incorrectly placed, out, or low. Insert the supply item or make sure the installed supply item is fully seated.	1. Press ✔ and then press **?** for help. 2. Follow the instructions on the display to locate and replace the missing or incorrect supply. 3. Press ▲ and ▼ to step through the instructions.
INSTALL TRANSFER **UNIT** **For help press ?**	None	The transfer unit is either not installed or not correctly installed in the printer.	1. Insert the transfer unit or make sure the installed transfer unit is fully seated. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through the instructions. 4. If the error persists, verify that the ETB connectors (J36 and J38 on the ETB and J1111 on the DC controller PCB) are good. Replace connectors as necessary. 5. Replace the ETB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
LOAD TRAY XX: **<TYPE> <SIZE>** **For help press ?**	None	Tray XX is either empty or configured for a type and size other than specified in the job. No other tray is available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
LOAD TRAY XX: **<TYPE> <SIZE>** **For help press ?** alternates with **LOAD TRAY XX:** **<TYPE> <SIZE>** **To use another** **tray press ✔**	None	Tray XX is either empty or configured for a type and size other than specified in the job.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Manually Feed **<TYPE> <SIZE>** **For help press ?** alternates with **Manually Feed** **<TYPE> <SIZE>** **To continue press ✔**	None	A job sent requires a specific paper type and size that is not currently available.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
NON HP CARTRIDGE **IN USE** alternates with **Ready** **For menus press ✔**	None	The printer has detected that a non-HP print cartridge is currently installed.	If you believe the cartridge is an HP cartridge, please call the HP fraud hotline at 877-219-3183. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty.
NON HP CARTRIDGE DETECTED	None	A new cartridge has been installed that is not made by HP. This message is displayed until an HP cartridge is installed or until STOP is pressed.	If you believe the cartridge is an HP cartridge, please call the HP fraud hotline at 877-219-3183. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty. To continue printing, press STOP. The first pending job will be cancelled.
ORDER <COLOR> **CARTRIDGE** alternates with **To continue press**	None	The identified print cartridge is nearing the end of its useful life and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP. Override by pressing ✔.	1. Order the identified print cartridge. 2. Press ✔ to continue. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
ORDER <COLOR> **CARTRIDGE** alternates with **XXXX PAGES LEFT**	None	The identified print cartridge is near end of life. The printer is ready and will continue for the estimated number of pages indicated.	1. Order the identified print cartridge. 2. Estimated pages remaining is based upon historical page coverage of this printer. 3. Printing will continue until **REPLACE <COLOR> CARTRIDGE** is shown. 4. Press **?** for detailed information. 5. Press ▲ and ▼ to step through instructions. 6. Supplies ordering information is also available from the embedded Web server.
ORDER FUSER KIT **XXXX PAGES LEFT** **For menus press ✔**	None	The fuser is near end of life. The printer is ready and will continue for the estimated number of pages indicated.	1. Order the image fuser kit. 2. Printing can continue until the fuser reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
ORDER FUSER KIT **XXXX PAGES LEFT** **To continue press ✔**	None	The fuser is near end of life and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP.	1. Order the image fuser kit. 2. Press ✔ to continue printing. Printing can continue until the fuser reaches end of life. 3. Supplies ordering information is also available from the embedded Web server.
ORDER SUPPLIES **For menus press ✔**	None	More than one supply item is low.	1. Press ✔ to identify which supplies should be ordered. 2. Order the identified supplies. 3. Printing can continue until supplies reach end of life. 4. Press **?** for detailed information. 5. Press ▲ and ▼ to step through instructions. 6. Supplies ordering information is also available from the embedded Web server.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
ORDER SUPPLIES **For status press ✔**	None	More than one supply item is low and the SUPPLIES LOW setting is set to STOP.	1. Press ✔ to identify which supplies should be ordered. 2. Order the identified supplies. 3. Press ✔ twice to continue printing. Printing can continue until supplies reach end of life. 4. Supplies ordering information is also available from the embedded Web server.
ORDER TRANSFER KIT **XXXX PAGES LEFT** **For menus press ✔**	None	The transfer unit is near end of life.	1. Order an image transfer kit. 2. Printing can continue until the transfer unit reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
ORDER TRANSFER KIT **XXXX PAGES LEFT** **To continue press ✔**	None	The number of pages remaining for the transfer unit has reached the low threshold and the SUPPLIES LOW setting in the SYSTEM SETUP submenu is set to STOP.	1. Order the transfer kit. 2. Printing can continue until the transfer unit reaches end of life. 3. Press **?** for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
Output Bin Full **Remove all paper** **from bin**	None	The output bin is full and must be emptied for printing to continue.	Remove media from the output bin.
Performing... **PAPER PATH TEST**	None	The printer is performing a Paper Path test.	No action is necessary; however, the data is useful to help troubleshoot paper jams.
Printing... **PQ troubleshooting**	None	The printer is generating the print quality troubleshooting pages. The printer will return to the **Ready** state when the pages are printed.	Follow the instructions on the printed pages.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Printing... **REGISTRATION PAGE**	None	The printer is generating the registration page. The printer will return to the **SET REGISTRATION** menu when the page is completed.	Follow the instructions on the printed pages.
Processing duplex job **Do not grab paper** **until job completes**	None	Paper temporarily comes into the output bin while printing a duplex job. Do not attempt to remove the pages until the job is complete.	Do not grab paper as it temporarily comes into the output bin. The message will disappear when the job is finished.
Receiving **upgrade**	None	A firmware upgrade is in progress.	Do not turn the printer off until the printer returns to **Ready**.
REINSTALL <COLOR> CARTRIDGE alternates with **For help press ?**	None	The cartridge is not fully seated.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through instructions.
REINSTALL SUPPLIES alternates with **For status press ✔**	None	One or more cartridges are not fully seated.	1. Press ✔ to display which cartridges are not fully seated. 2. Follow the instructions on the display to reinstall the cartridge(s). 3. Press ▲ and ▼ to step through instructions.
REMOVE ALL **PRINT CARTRIDGES** **To exit press** **Cancel Job key**	None	The printer is executing a Component test and the component selected is Belt only.	Remove all print cartridges.
REMOVE AT LEAST ONE **CARTRIDGE** **To exit press** **Cancel Job key**	None	The printer is executing a Disable cartridge check or Component test where the component selected is Cartridge Motor.	Remove one print cartridge.
REPLACE <COLOR> **CARTRIDGE** alternates with **For help press ?**	None	The identified print cartridge has reached the end of life. Printing will not continue until the cartridge is replaced.	1. Replace the identified print cartridge to continue printing. 2. Press **?** for detailed information. 3. Press ▲ and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
REPLACE FUSER KIT	None	The fuser kit is at end of life.	1. Replace the fuser to continue printing. 2. Press ? for detailed information. 3. Press ▲ and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.
REPLACE SUPPLIES **For status press ✔**	None	At least one supply item is out and needs to be replaced and another supply item is either out or low.	1. Press ✔ to identify which supplies should be replaced. 2. Replace the identified supplies to continue printing. 3. Press ? for detailed information. 4. Press ▲ and ▼ to step through instructions. 5. Supplies ordering information is also available from the embedded Web server.
REPLACE TRANSFER KIT **For help press ?**	None	The transfer unit has reached end of life.	1. Replace the transfer unit to continue printing. 2. Press ? for detailed information. 3. Press ▲and ▼ to step through instructions. 4. Supplies ordering information is also available from the embedded Web server.
Resend **upgrade**	None	The firmware upgrade was not completed successfully.	Attempt upgrade again.
Rotating <COLOR> **cartridge motor** **To exit press** **Cancel Job key**	None	A component test is in progress; the component selected is <color> Cartridge motor.	Press STOP when ready to stop this test.
Rotating <COLOR> laser scanner **To exit press** **the STOP key**	None	A Scanner test is in progress.	PressSTOP when ready to stop this test.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Rotating... **belt drive** **To exit press** **Cancel Job key**	None	The printer is executing a Component Test and the component selected is Belt Only.	Press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550) when ready to stop this test.
Rotating... **fuser motor** **To exit press** **Cancel Job key**	None	The printer is testing the developing disengaging motor. (This motor is called the "alienation motor" in firmware messages.)	Press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550) when ready to stop this test.
Rotating... **fuser motor** **To exit press** **Cancel Job key**	None	The printer is executing a Component test and the component selected is Fuser Motor.	Press STOP when ready to stop this test.
Rotating... **transfer motors** **To exit press** **Cancel Job key**	None	The printer is executing a Component test and the component selected is Transfer Motors.	Press STOP when ready to stop this test.
SIZE MISMATCH IN **TRAY X** **For help press ?** alternates with **Ready** **For menus press ✔**	None	The tray is loaded with media longer or shorter in the feed direction than the size configured for the tray.	1. Adjust the side and rear media guides against the paper. 2. If the media used is Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 x 17, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel. 3. Reset the paper size in the paper handling menu.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
Tray X **<TYPE> <SIZE>** **Size detected by tray** alternates with **Tray X** **<TYPE> <SIZE>** **To change type** **Press ✔**	None	The printer is reporting the current configuration of tray XX. The tray switch is in the STANDARD position.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 x 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the tray. 4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.
Tray X **<TYPE> <SIZE>** **Size specified by user** alternates with **Tray X** **<TYPE> <SIZE>** **To change type** **Press ✔**	None	The printer is reporting the current configuration of tray XX. The tray switch is in the CUSTOM position.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 x 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, leave the tray switch in the CUSTOM position, adjust the media guides against the media, and close the tray. 4. Select the paper handling menu from the control panel. Configure the size for the tray.
TRAY X EMPTY **<TYPE> <SIZE>** alternates with **Ready** **For menus press ✔**	None	The specified tray is empty and needs to be filled but the current job does not need this tray to print correctly.	Refill the tray at a convenient time.
TRAY X OPEN **For help press ?** alternates with **Ready** **For menus press ✔**	None	The specified tray is open or not closed completely.	Close the tray.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
TRAY X SIZE= **<SIZE>** **For help press ?** alternates with **TRAY X SIZE=** **<SIZE>** **To change, move** **switch in tray XX**	None	A non-detectable media size was selected from the menu and the tray switch is set to STANDARD. The size selected from the menu does not match the size detected by the tray. Size detection occurs when the tray switch is set in the STANDARD position.	1. Adjust the side and rear media guides against the paper. 2. If the media used is Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 x 17, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel. 3. Reset the paper size in the paper handling menu.
TRAY XX CONTAINS **UNKNOWN MEDIA**	None	The media type in the specified tray cannot be determined.	1. To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select. 2. To change the media size to Letter, Letter-R, A4, A4-R, Executive, B5 JIS, B5-R, A5, A5-R, A3, 11 x 17, or Legal, leave the tray switch in the STANDARD position. 3. To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the tray. 4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.
TYPE MISMATCH **TRAY XX= <TYPE>** alternates with **Ready** **To enter menus, press** **Press ✔**	None	This warning appears after the printer has detected an overhead transparency in the paper path when the tray is configured for another type, resulting in a 41.5 Unexpected Type in Tray XX error. The user did not reconfigure the tray after the error message appeared, so the printer determines that the type of media is not what the tray is configured to hold.	To change media type, press ✔. Use ▲ and ▼ to highlight the type, then press ✔ to select.
Unable To Store Job **JOB NAME**	None	A job cannot be stored because of a memory, disk, or configuration problem.	Install additional memory in the printer, or install a disk drive into the printer. If a disk drive is installed, delete previously stored print jobs.

Table 7-3. Alphabetical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
USE INSTEAD? **TRAY XX: <TYPE>** **<SIZE>**	None	The printer is offering a selection of alternate media to use for the print job.	Highlight the media with ▲ and ▼. Press ✔ to select a choice.

NOTE Not all messages are described in the tables; those messages that are not listed are self-explanatory.

Numerical printer messages

NOTE Many of the procedures in this section instruct you to replace the DC controller PCB, the ETB, the formatter, the drum drive motors, the drum drive gears, or a laser/scanner unit. After replacing one of these items, you must access the Print Quality menu and select **CALIBRATE NOW** to ensure proper print quality after the repair. See Calibrate now (HP Color LaserJet 5500 models only), for instructions on calibrating the printer. When the ETB or the fuser are replaced before their normal end of life, access the Resets menu and reset the counter to zero. See Replacing the transfer unit (ETB) and Replacing the fuser for instructions.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models)

Control panel message	Event log error message	Description	Recommended action
10.X.X SUPPLY **MEMORY ERROR** **For help press ?**	None	**NOTE** The printer cannot always determine whether the error lies with the cartridge or with the printer reader/writer. The printer cannot read or write to at least one print cartridge memory tag or at least one memory tag is missing. **XX Description** 00 memory error on supply item 10 memory tag missing **YY Description** 00 black print cartridge 01 cyan print cartridge 02 magenta print cartridge 03 yellow print cartridge	1. Turn the printer off and then back on. 2. Swap the cartridge for the color indicated with a cartridge in another slot to determine whether the error follows the cartridge or stays with the slot. If the error follows the cartridge, replace that cartridge. Otherwise, continue with step 3. 3. Reseat the connectors between the memory PCB (J601-J605) and the antenna PCBs (J903), the memory PCB, and the DC controller PCB (J1122). 4. Replace the antenna PCB. 5. Replace the memory PCB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY DUPLEX **JOB INTERRUPTED** **For help press ?** alternates with **13.XX.YY DUPLEX** **JOB INTERRUPTED** **Discard top sheet** **and press ✔** or **13.XX.YY DUPLEX** **JOB INTERRUPTED** **Discard top two** **sheets and press ✔**	None	A duplex job was interrupted by interference as media passed through the output bin during duplexing.	1. Press **?** for more information. 2. Remove one or two pages from the output bin as directed by the display. 3. Press ✔ to continue printing. **NOTE** If **OFF** some pages will not be reprinted. Re-send the missing pages.
13.XX.YY JAM IN **DUPLEX PATH** **For help press ?**	None	There is a jam in the duplex path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Check if the ETB rollers or gears are worn or defective. Replace the ETB if they are. 4. Check the duplex feed guide, which is part of the control panel crossmember assembly. If the guide is worn or damaged, replace the crossmember assembly.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **JAMS IN PAPER PATH** **For help press ?**	None	There is a jam in the top cover area.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. **WARNING!** The fuser might be hot. 3. Check that the fuser paper sensor is in place. If it is defective, replace it. 4. Replace the fuser. 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
13.XX.YY JAM IN **PAPER INPUT PATH** **For help press ?**	None	There is a jam in the media input path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Check the registration shutter, and make sure it is in place. Replace the paper pickup assembly if the shutter is damaged. 4. Check the paper pickup feed rollers, and replace them if they are worn or damaged. 5. Check the connectors, gears, solenoid, clutch, motors, sensors, and PCBs on the paper pickup assembly. Replace the paper pickup assembly if necessary. 6. Check the cassette lifter mechanism for proper operation.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **PAPER PATH** **For help press ?**	None	There is a jam in the media path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. If paper is folding into an accordion shape, check whether the shutter on each print cartridge opens as you close the ETB and if each cartridge is turning properly. Replace defective print cartridges or drive motors. 4. Clean the attaching roller at the bottom of the ETB and make sure the spring is holding it in place. 5. If the attaching roller gears are defective, replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only). 6. Replace the paper pickup PCB. 7. Replace the ETB if it is not moving paper properly. Calibrate the printer. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **TRAY 1** **For help press ?**	None	A page is jammed in the multi-purpose tray.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean or replace the separation pad. 5. Replace the Tray 1 pickup solenoid. 6. Replace the pickup motor. 7. Replace the paper pickup assembly. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
13.XX.YY JAM IN **TRAY 2** **For help press ?**	None	A page is jammed in Tray 2.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean the feed roller. If it is worn or damaged, replace it. 5. Replace the Tray 2 pickup clutch. 6. Replace the pickup motor. 7. Replace the paper pickup assembly. 8. Check the cassette lifter mechanism for proper operation. 9. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **TRAY X** **For help press ?**	None	A page is jammed in Tray 3 or Tray 4.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean the feed roller. If it is worn or damaged, replace it. 5. Replace the Tray 3 or Tray 4 pickup clutch. 6. Replace the Tray 3 or Tray 4 pickup motor. 7. Replace the Tray 3 or Tray 4 paper feeder PCB. 8. Check the cassette lifter mechanism for proper operation. 9. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
20 INSUFFICIENT **MEMORY** **For help press ?** alternates with **20 INSUFFICIENT** **MEMORY** **To continue press ✔**	None	The printer has received more data from the computer than fits in available memory.	1. Press ✔ to resume printing. **NOTE** A loss of data will occur. 2. Reduce the complexity of the print job to avoid this error. 3. Adding memory to the printer may allow printing of more complex pages.
22 EIO X **BUFFER OVERFLOW** **To continue press ✔**	None	The printer's EIO card in slot X has overflowed its I/O buffer during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
22 PARALLEL I/O **BUFFER OVERFLOW** **For help press ?** alternates with **22 PARALLEL I/O** **BUFFER OVERFLOW** **To continue press ✔**	None	The printer's parallel buffer has overflowed during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
22 SERIAL I/O **BUFFER OVERFLOW** **To continue press ✔**	None	The printer's serial buffer has overflowed during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
40 BAD SERIAL **TRANSMISSION** **To continue press ✔**	None	A serial data error (parity, framing, or line overrun) has occurred while the printer was receiving data.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
40 EIO X BAD **TRANSMISSION** **To continue press ✔**	None	A connection with the card in EIO slot X has been abnormally broken.	1. Press ✔ to resume printing. **NOTE** A loss of data will occur. 2. Check that all cables are connected to the EIO ports and that the EIO board is seated properly. 3. If possible, print to another network printer to verify the network is working properly.
41.3 UNEXPECTED **SIZE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X** **<TYPE> <SIZE>** **For help press ?**	None	Media is loaded which is longer or shorter in the feed direction than the size configured for the tray.	1. If the incorrect size was selected, cancel the job or press ? to access help. 2. Press ▲ and ▼ to step through the instructions.
41.5 UNEXPECTED **TYPE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X;** **<TYPE> <SIZE>;** **For help press ?**	None	The printer senses a different media type in the media path than configured in the tray.	1. If the incorrect type was selected, cancel the job or press ? to access help. 2. Press ▲ and ▼ to step through the instructions.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
41.X **PRINTER ERROR** **For help press ?** alternates with **41.X** **PRINTER ERROR** **To continue press ✔**	None	A printer error has occurred. **X Description** 1 unknown misprint error 2 beam detect misprint error 3 media feed error (size) 4 no VSYNC error 5 media feed error (type) 6 ETB detection error 7 feed delay error 9 noise VSREQ	1. Press ✔ to continue or press **?** for more information. 2. If the message persists, turn the printer off and then back on.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
49.XXXX **PRINTER ERROR** **To continue** **turn off then on**	None	A critical firmware error has occurred that caused the processor on the formatter to abort operation. This type of error can be caused by invalid print commands, corrupt data, or invalid operations. In some cases, electrical noise in the cable can corrupt data during transmission to the printer. Other causes include poor quality parallel cables, poor connections, or home-grown applications. On rare occasions, the formatter is at fault, which is usually indicated by a 79 Service Error.	1. Press CANCEL JOB to clear the print job from the printer memory. 2. Turn the printer off and then back on. 3. Try printing a job from a different software application. If the job prints, go back to the first application and try printing a different file. If the message appears only with a certain software application or print job, contact the software vendor for assistance. 4. If the message persists with different software applications and print jobs, disconnect all cables to the printer that connect it to the network or PC. 5. Turn the printer off. 6. Remove all memory DIMMs or third-party DIMMs from the printer. (Do not remove the firmware DIMM in slot J1.) 7. Remove all EIO devices from the printer. 8. Turn the printer on. 9. If the error no longer exists, install each DIMM and EIO device one at a time, making sure to turn the printer off and back on as you install each device. 10. Replace a DIMM or EIO device if you determine that it causes the error. 11. Remember to reconnect all cables that connect the printer to the network or computer. 12. If the error persists, replace the firmware DIMM. 13. Replace the formatter and calibrate the printer. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
50.X FUSER ERROR **For help press ?**	None	A fuser error has occurred. **X Description** 1 low fuser temperature 2 fuser warmup service 3 high fuser temperature 4 faulty fuser 5 inconsistent fuser 6 open fuser 7 fuser pressure release mechanism failure 8 low fuser temperature (sub=thermistor) 9 high fuser temperature (sub=thermistor)	1. Turn the printer off and allow it to cool down. 2. Reinstall the fuser, and check the connector (J100) that connects the fuser and the printer. Replace the connector if it is damaged. 3. Turn the printer off and remove the fuser. Measure the resistance between the connector pins on the fuser. If resistance does not meet the following guidelines, replace the fuser. J100LB-5 to J100LB-6: 300 - 500 KOhms J100LB-1 to J100LB-2: less than 1 KOhm 4. Check for continuity between connector pins J100-5 and J100-6. If there is no continuity, replace the fuser. 5. Replace the fuser power supply PCB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
51.XY **PRINTER ERROR** **For help press ?** alternates with **51.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. **X Description** 1 beam detect error 2 laser error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat the connectors between the laser/scanner (J74 - J77) and DC controller PCB (J1106 - J1109). 4. Replace the defective laser/scanner assembly. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
52.XY **PRINTER ERROR** **For help press ?** alternates with **52.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. **X Description** 1 scanner error 2 scanner startup error 3 scanner rotation error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat the connectors between the laser/scanner (J74 - J77) and DC controller PCB (J1106 - J1109). 4. Replace the defective laser/scanner assembly. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
53.10.05 **PRINTER ERROR** **To continue** **turn off then on**	None	A DIMM is installed in both 168-pin DIMM Slot 4 and 100-pin DIMM Slot 5.	This is an invalid configuration. DIMMs can not be installed in both of these slots at the same time. Remove one of the DIMMs, or move one of the DIMMs to a different slot.
53.X0.ZZ **PRINTER ERROR** **To continue** **turn off then on**	None	An error has occurred in the onboard RAM.	1. Press ✔ to continue. 2. Turn the printer off and then back on.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
53.XY.ZZ CHECK RAM **DIMM SLOT X** **To continue press** **CANCEL JOB**	None	An error occurred on some memory of the printer. **X DIMM Type** 1 RAM **Y Device Location** 1 DIMM Slot 1 2 DIMM Slot 2 3 DIMM Slot 3 4 DIMM Slot 4 **ZZ Error Number** 0 unsupported memory 1 unrecognized memory 2 unsupported memory size 3 failed RAM test 4 exceeded maximum RAM size 5 invalid DIMM speed	Press CANCEL JOB. If the problem persists, replace the DIMM card in the slot indicated.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
54.XX PRINTER ERROR	None	**X Description** 1 temperature 3 image density sensor 5 color plane registration sensor 6 image density sensor 7 yellow drum home position sensor 8 magenta drum home pos. sensor 9 cyan drum home position sensor 10 black drum home position sensor 11 yellow density sensor 12 magenta density sensor 13 cyan density sensor 14 black density sensor 19 ETB speed control sensor 20 color plane registration sensor 21 yellow toner level sensors 22 magenta toner level sensors 23 cyan toner level sensors 24 black toner level sensors 1E or 30 Half tone calibration error 01 Humidity environmental sensor abnormal	Turn the printer off and then back on, then check items in the order listed. **54.1 error** Check the fuser. See 50.X fuser error. **54.30 error** Wipe sensor lens clean. Run a full calibration and the error should go away. **54.3 error** Check the connections. Replace the color registration detection assembly. **54.5 error** Check the connections. Replace the color registration detection assembly. **54.6 error** Check the connections. Replace the color registration detection assembly. **54.7, 54.8, 54.9, or 54.10 error** Check the connections. Replace the drum phase sensor for the indicated color. **54.11, 54.12, 54.13, or 54.14 error** Check the connections. Check the cartridge and replace it if necessary. Replace the color registration detection assembly. **54.19 error** Check the ETB connection. Replace the ETB. Replace the DC controller. **54.20 error** Check the connection. Replace the color registration detection assembly. **54.21, 54.22, 54.23, or 54.24 error** Check the connections. Replace the toner level sensing PCB. Replace the DC controller.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
55.X **PRINTER ERROR** **For help press ?** alternates with **55.X** **PRINTER ERROR** **To continue press ✔**	None	The DC controller is not communicating with the formatter. The problem could be caused by a timing error or an intermittent connection. X — Description 00 — Communication error 01 — DC Controller memory error 02 — Outgoing parity error 03 — No engine response 04 — Communication timeout	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat or replace the connectors between the DC controller and the formatter. 4. If the problem persists, replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the formatter. Initialize NVRAM. See NVRAM initialization.
56.XX **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. XX — Description 01 — Illegal input 02 — Illegal output	1. Turn the printer off and then back on. 2. If problems persist, contact HP Support at http://www.hp.com/support/clj5500.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
57.X **PRINTER ERROR** **To continue** **turn off then on**	None	A printer fan error has occurred. **X Description** 3 cartridge fan (vertical fan, FM3) 4 formatter fan (horizontal fan, FM2) 7 power suppply fan (FM1)	Turn the printer off and then back on. **57.3 Cartridge fan error (FM3)** 1. Reconnect the connectors J10 for the cartridge fan and J1102 on the DC controller PCB. 2. Immediately after starting the print operation, measure the voltage between pins 1 and 3 on the J10 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the cartridge fan. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **57.4 Formatter fan error (FM2)** 1. Reconnect the connectors J11 for the formatter fan and J1102 on the DC controller PCB. 2. Immediately after turning the printer on, measure the voltage between pins 4 and 6 on the J1102 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the formatter fan. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
57.X **PRINTER ERROR** **To continue** **turn off then on**	None		**57.7 Power supply fan error (FM2)** 1. Reconnect the connectors J1104 and J1133 on the DC controller PCB. 2. Disconnect the connector J1133. Immediately after turning the printer on, measure the voltage between pins 1 and 3 on the J1133 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the power supply fan. 3. Replace the low-voltage power supply. 4. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
58.X **PRINTER ERROR** **For help press ?** alternates with **58.X** **PRINTER ERROR** **To continue** **turn off then on**	None	A memory tag error was detected. **X Description** 2 air temp sensor 3 CPU 4 power supply	1. Turn the printer off and then back on. 2. Replace the memory PCB. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
59.XY **PRINTER ERROR** **For help press ?** alternates with **59.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer motor error has occurred. **X Description** 0 motor error 1 motor startup error 2 motor rotation error 3 fuser motor startup error 4 fuser motor rotation error 5 print cartridge motor startup error 6 print cartridge motor rotation error 9 ETB motor startup error A ETB motor rotation error B developing disengaging motor startup error C developing disengaging motor rotation error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Turn the printer off and then back on. 2. This message might also appear if the transfer unit is missing or incorrectly installed. Ensure that the transfer unit is correctly installed. **ETB motor error** 1. Clean the ETB unit intermediate connector, J36. If the connector is damaged, replace it. 2. Reconnect the connetors J38 for the ETB motor and J1111 on the DC controller PCB. 3. Replace the ETB motor. 4. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **Fuser motor error** 1. Reconnect the connectors J18 for the fuser motor and J1101 on the DC controller PCB. Replace any damaged parts. 2. Replace the fuser drive assembly. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
59.XY (continued) **PRINTER ERROR** **For help press ?** alternates with **59.XY** **PRINTER ERROR** **To continue** **turn off then on**	None		**Print cartridge motor error** 1. Reconnect the print cartridge connector on the DC controller PCB (J1124 for cyan, J1126 for magenta, J1125 for yellow, and J1127 for black). 2. Replace the drum drive assembly for the indicated print cartridge. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **Developing disengaging motor error** 1. Reconnect the connectors J16 for the developing disengaging motor and J1100 for the DC controller PCB. 2. Replace the developing disengaging drive assembly. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
62 NO SYSTEM **To continue** **turn off then on**	None	No system was found.	1. Turn the printer off and then back on. 2. Reseat the firmware DIMM, making sure it is in the 168-pin slot J1.
64 PRINTER ERROR **For help press ?** alternates with **64 PRINTER ERROR** **To continue** **turn off then on**	None	Scan buffer error.	1. Turn the printer off and then back on. 2. Perform a cold reset. See Cold reset for instructions. 3. If the message persists, replace the formatter or firmware DIMM.

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
68.X PERMANENT **STORAGE ERROR** **For help press ?** alternates with **68.X PERMANENT** **STORAGE ERROR** **To continue** **Press ✔**	None	One or more printer settings saved in the non-volatile storage device is invalid and has been reset to its factory default. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Check the printer settings to determine which settings have been changed.
68.X PERMANENT **STORAGE FULL** **For help press ?** alternates with **68.X PERMANENT** **STORAGE FULL** **To continue** **press ✔**	None	A non-volatile storage device is full. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. For **68.0** errors, turn the printer off and then back on. 3. If a 68.0 error persists, execute an NVRAM inititialization. See NVRAM initialization. 4. For **68.1** errors, use the HP Web Jetadmin software to delete files from the disk drive. 5. If a 68.1 errors persists, reinitialize the hard disk. See Hard disk initialization.
68.X PERMANENT **STORAGE WRITE FAIL** **To continue press ✔**	None	A non-volatile storage device is failing to write. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. If the problem persists, initialize NVRAM. See NVRAM initialization. 4. Reinitialize the hard disk. See Hard disk initialization.
79.XXXX **PRINTER ERROR** **To continue** **turn off then on**	None	A critical hardware error has occurred.	1. Turn the printer off and then back on. 2. If the problem persists, reseat the firmware DIMM. 3. Reseat the formatter. 4. Replace the firmware DIMM. 5. Replace the formatter. Calibrate the priner. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-4. Numerical printer messages (HP Color LaserJet 5500 models) (continued)

Control panel message	Event log error message	Description	Recommended action
8X.YYYY **EIO ERROR**	None	The EIO accessory card in slot X has encountered a critical error.	1. Turn the printer off and then back on. 2. If the problem persists, reseat the EIO card. 3. Replace the EIO card.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models)

Control panel message	Event log error message	Description	Recommended action
10.XX.YY SUPPLIES **ERROR** **For help press ?**	None	**NOTE** The printer cannot always determine whether the error lies with the cartridge or with the printer reader/writer. The printer cannot read or write to at least one print cartridge memory tag or at least one memory tag is missing. **XX Description** 00 memory error on supply item 10 memory tag missing **YY Description** 00 black print cartridge 01 cyan print cartridge 02 magenta print cartridge 03 yellow print cartridge	1. Turn the printer off and then back on. 2. Swap the cartridge for the color indicated with a cartridge in another slot to determine whether the error follows the cartridge or stays with the slot. If the error follows the cartridge, replace that cartridge. Otherwise, continue with step 3. 3. Reseat the connectors between the memory PCB (J601-J605) and the antenna PCBs (J903), the memory PCB, and the DC controller PCB (J1122). 4. Replace the antenna PCB. 5. Replace the memory PCB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **DUPLEX PATH** **For help press ?**	None	There is a jam in the duplex path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Check if the ETB rollers or gears are worn or defective. Replace the ETB if they are. 4. Check the duplex feed guide, which is part of the control panel crossmember assembly. If the guide is worn or damaged, replace the crossmember assembly.
13.XX.YY JAM IN **PAPER INPUT PATH** **For help press ?**	None	There is a jam in the media input path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Check the registration shutter, and make sure it is in place. Replace the paper pickup assembly if the shutter is damaged. 4. Check the paper pickup feed rollers, and replace them if they are worn or damaged. 5. Check the connectors, gears, solenoid, clutch, motors, sensors, and PCBs on the paper pickup assembly. Replace the paper pickup assembly if necessary. 6. Check the cassette lifter mechanism for proper operation.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **PAPER PATH** **For help press ?**	None	There is a jam in the media path.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. If paper is folding into an accordion shape, check whether the shutter on each print cartridge opens as you close the ETB and if each cartridge is turning properly. Replace defective print cartridges or drive motors. 4. Clean the attaching roller at the bottom of the ETB and make sure the spring is holding it in place. 5. If the attaching roller gears are defective, replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only). 6. Replace the paper pickup PCB. 7. Replace the ETB if it is not moving paper properly. Calibrate the printer. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **TOP COVER AREA** **For help press ?**	None	There is a jam in the top cover area.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. **WARNING!** The fuser might be hot. 3. Check that the fuser paper sensor is in place. If it is defective, replace it. 4. Replace the fuser. 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
13.XX.YY JAM IN **TRAY 1** **For help press ?**	None	A page is jammed in the multi-purpose tray.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean or replace the separation pad. 5. Replace the Tray 1 pickup solenoid. 6. Replace the pickup motor. 7. Replace the paper pickup assembly. 8. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN **TRAY 2** **For help press ?**	None	A page is jammed in Tray 2.	1. Press ? for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean the feed roller. If it is worn or damaged, replace it. 5. Replace the Tray 2 pickup clutch. 6. Replace the pickup motor. 7. Replace the paper pickup assembly. 8. Check the cassette lifter mechanism for proper operation. 9. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
13.XX.YY JAM IN **TRAY X** **For help press ?**	None	A page is jammed in Tray 3 or Tray 4.	1. Press ? for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. Clean the pickup roller. If it is worn or damaged, replace it. 4. Clean the feed roller. If it is worn or damaged, replace it. 5. Replace the Tray 3 or Tray 4 pickup clutch. 6. Replace the Tray 3 or Tray 4 pickup motor. 7. Replace the Tray 3 or Tray 4 paper feeder PCB. 8. Check the cassette lifter mechanism for proper operation. 9. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
13.XX.YY JAM IN DUPLEX **JOB INTERRUPTED** **For help press ?** alternates with **13.XX.YY JAM IN DUPLEX** **JOB INTERRUPTED** **Discard top sheet** **and press ✔** or **13.XX.YY JAM IN DUPLEX** **JOB INTERRUPTED** **Discard top two** **sheets and press ✔**	None	A duplex job was interrupted by interference as media passed through the output bin during duplexing.	1. Press **?** for more information. 2. Remove one or two pages from the output bin as directed by the display. 3. Press ✔ to continue printing. **NOTE** If **Jam Recovery= OFF** some pages will not be reprinted. Re-send the missing pages.
20 INSUFFICIENT **MEMORY** **For help press ?** alternates with **20 INSUFFICIENT** **MEMORY** **To continue press** **Press ✔**	None	The printer has received more data from the computer than fits in available memory.	1. Press ✔ to resume printing. **NOTE** A loss of data will occur. 2. Reduce the complexity of the print job to avoid this error. 3. Adding memory to the printer may allow printing of more complex pages.
22 EIO X **BUFFER OVERFLOW** **For help press ?** alternates with **22 PARALLEL I/O** **BUFFER OVERFLOW** **To continue** **Press ✔**	None	The printer's parallel buffer has overflowed during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
22 EIO X **BUFFER OVERFLOW** **To continue press** **Press ✔**	None	The printer's EIO card in slot X has overflowed its I/O buffer during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
22 SERIAL I/O **BUFFER OVERFLOW** **To continue** **Press ✔**	None	The printer's serial buffer has overflowed during a busy state.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
40 BAD SERIAL **TRANSMISSION** **To continue press** **Press ✔**	None	A serial data error (parity, framing, or line overrun) has occurred while the printer was receiving data.	Press ✔ to resume printing. **NOTE** A loss of data will occur.
40 EIO X BAD **TRANSMISSION** **To continue press** **Press ✔**	None	A connection with the card in EIO slot X has been abnormally broken.	1. Press ✔ to resume printing. **NOTE** A loss of data will occur. 2. Check that all cables are connected to the EIO ports and that the EIO board is seated properly. 3. If possible, print to another network printer to verify the network is working properly.
41.3 UNEXPECTED **SIZE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X** **<TYPE> <SIZE>** **For help press ?**	None	Media is loaded which is longer or shorter in the feed direction than the size configured for the tray.	1. If the incorrect size was selected, cancel the job or press ? to access help. 2. Press ▲ and ▼ to step through the instructions.
41.5 UNEXPECTED **TYPE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X** **<TYPE> <SIZE>** **For help press ?**	None	The printer senses a different media type in the media path than configured in the tray.	1. If the incorrect type was selected, cancel the job or press ? to access help. 2. Press ▲ and ▼ to step through the instructions.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
41.X **PRINTER ERROR** **For help press ?** alternates with **41.X** **PRINTER ERROR** **To continue press** **Press ✔**	None	A printer error has occurred. **X Description** 1 unknown misprint error 2 beam detect misprint error 3 media feed error (size) 4 no VSYNC error 5 media feed error (type) 6 ETB detection error 7 feed delay error 9 noise VSREQ	1. Press ✔ to continue or press **?** for more information. 2. If the message persists, turn the printer off and then back on.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
49.XXXX **PRINTER ERROR** **To continue** **turn off then on**	None	A critical firmware error has occurred that caused the processor on the formatter to abort operation. This type of error can be caused by invalid print commands, corrupt data, or invalid operations. In some cases, electrical noise in the cable can corrupt data during transmission to the printer. Other causes include poor quality parallel cables, poor connections, or home-grown applications. On rare occasions, the formatter is at fault, which is usually indicated by a 79 Service Error.	1. Press CANCEL JOB to clear the print job from the printer memory. 2. Turn the printer off and then back on. 3. Try printing a job from a different software application. If the job prints, go back to the first application and try printing a different file. If the message appears only with a certain software application or print job, contact the software vendor for assistance. 4. If the message persists with different software applications and print jobs, disconnect all cables to the printer that connect it to the network or PC. 5. Turn the printer off. 6. Remove all memory DIMMs or third-party DIMMs from the printer. (Do not remove the firmware DIMM in slot J1.) 7. Remove all EIO devices from the printer. 8. Turn the printer on. 9. If the error no longer exists, install each DIMM and EIO device one at a time, making sure to turn the printer off and back on as you install each device. 10. Replace a DIMM or EIO device if you determine that it causes the error. 11. Remember to reconnect all cables that connect the printer to the network or computer. 12. If the error persists, replace the firmware DIMM. 13. Replace the formatter and calibrate the printer. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
50.X FUSER ERROR **For help press ?**	None	A fuser error has occurred. **X Description** 1 low fuser temperature 2 fuser warmup service 3 high fuser temperature 4 faulty fuser 5 inconsistent fuser 6 open fuser 7 fuser pressure release mechanism failure 8 low fuser temperature (sub=thermistor) 9 high fuser temperature (sub=thermistor)	1. Turn the printer off and allow it to cool down. 2. Reinstall the fuser, and check the connector (J100) that connects the fuser and the printer. Replace the connector if it is damaged. 3. Turn the printer off and remove the fuser. Measure the resistance between the connector pins on the fuser. If resistance does not meet the following guidelines, replace the fuser. J100LB-5 to J100LB-6: 300 - 500 KOhms J100LB-1 to J100LB-2: less than 1 KOhm 4. Check for continuity between connector pins J100-5 and J100-6. If there is no continuity, replace the fuser. 5. Replace the fuser power supply PCB. 6. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
51.XY **PRINTER ERROR** **For help press ?** alternates with **51.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. **X Description** 1 beam detect error 2 laser error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat the connectors between the laser/scanner (J74 - J77) and DC controller PCB (J1106 - J1109). 4. Replace the defective laser/scanner assembly. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
52.XY **PRINTER ERROR** **For help press ?** alternates with **52.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. **X Description** 1 scanner error 2 scanner startup error 3 scanner rotation error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat the connectors between the laser/scanner (J74 - J77) and DC controller PCB (J1106 - J1109). 4. Replace the defective laser/scanner assembly. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
53.10.05 **PRINTER ERROR** **To continue** **turn off then on**	None	A DIMM is installed in both 168-pin DIMM Slot 4 and 100-pin DIMM Slot 5.	This is an invalid configuration. DIMMs can not be installed in both of these slots at the same time. Remove one of the DIMMs, or move one of the DIMMs to a different slot.
53.X0.ZZ **PRINTER ERROR** **To continue** **turn off then on**	None	An error has occurred in the onboard RAM.	1. Press ✔ to continue. 2. Turn the printer off and then back on.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
53.XX.ZZ CHECK RAM **DIMM SLOT X** **To continue press** **STOP**	None	An error occurred on some memory of the printer. **DIMM SLOT X** 0 Onboard memory 1 SLOT 1 2 SLOT 2 **Y Bank number** 0 No useful bank info 1 Bank number 1 2 Bank number 2 3 Bank number 3 4 Bank number 4 **ZZ Error Number** 00 UNSUPPORTED MEMORY 01 UNRECOGNIZED MEMORY 02 UNDER MINIMUM MEMORY LIMIT 03 EXCEEDED MAXIMUM MEMORY LIMIT 04 FAILED RAM TEST	Press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550). If the problem persists, replace the DIMM card in the slot indicated.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
54.XX PRINTER ERROR	None	**X Description** 1 temperature 3 image density sensor 5 color plane registration sensor 6 image density sensor 7 yellow drum home position sensor 8 magenta drum home pos. sensor 9 cyan drum home position sensor 10 black drum home position sensor 11 yellow density sensor 12 magenta density sensor 13 cyan density sensor 14 black density sensor 19 ETB speed control sensor 20 color plane registration sensor 21 yellow toner level sensors 22 magenta toner level sensors 23 cyan toner level sensors 24 black toner level sensors 1E or 30 Half tone calibration error 01 Humidity environmental sensor abnormal	Turn the printer off and then back on, then check items in the order listed. **54.1 error** Check the fuser. See 50.X fuser error. **54.30 error** Wipe sensor lens clean. Run a full calibration and the error should go away. **54.3 error** Check the connections. Replace the color registration detection assembly. **54.5 error** Check the connections. Replace the color registration detection assembly. **54.6 error** Check the connections. Replace the color registration detection assembly. **54.7, 54.8, 54.9, or 54.10 error** Check the connections. Replace the drum phase sensor for the indicated color. **54.11, 54.12, 54.13, or 54.14 error** Check the connections. Check the cartridge and replace it if necessary. Replace the color registration detection assembly. **54.19 error** Check the ETB connection. Replace the ETB. Replace the DC controller. **54.20 error** Check the connection. Replace the color registration detection assembly. **54.21, 54.22, 54.23, or 54.24 error** Check the connections. Replace the toner level sensing PCB. Replace the DC controller.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
55.X **PRINTER ERROR** **For help press ?** alternates with **55.X** **PRINTER ERROR** **To continue press** **press ✔**	None	The DC controller is not communicating with the formatter. The problem could be caused by a timing error or an intermittent connection. X — Description 00 — Communication error 01 — DC Controller memory error 02 — Outgoing parity error 03 — No engine response 04 — Communication timeout	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Reseat or replace the connectors between the DC controller and the formatter. 4. If the problem persists, replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). 5. Replace the formatter. Initialize NVRAM. See NVRAM initialization.
56.XX **PRINTER ERROR** **To continue** **turn off then on**	None	A printer error has occurred. XX — Description 01 — Illegal input 02 — Illegal output	1. Turn the printer off and then back on. 2. If problems persist, contact HP Support at http://www.hp.com/support/clj5500.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
57.X **PRINTER ERROR** **To continue** **turn off then on**	None	A printer fan error has occurred. **X Description** 3 cartridge fan (vertical fan, FM3) 4 formatter fan (horizontal fan, FM2) 7 power suppply fan (FM1)	Turn the printer off and then back on. **57.3 Cartridge fan error (FM3)** 1. Reconnect the connectors J10 for the cartridge fan and J1102 on the DC controller PCB. 2. Immediately after starting the print operation, measure the voltage between pins 1 and 3 on the J10 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the cartridge fan. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **57.4 Formatter fan error (FM2)** 1. Reconnect the connectors J11 for the formatter fan and J1102 on the DC controller PCB. 2. Immediately after turning the printer on, measure the voltage between pins 4 and 6 on the J1102 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the formatter fan. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
57.X **PRINTER ERROR** **To continue** **turn off then on**	None		**57.7 Power supply fan error (FM2)** 1. Reconnect the connectors J1104 and J1133 on the DC controller PCB. 2. Disconnect the connector J1133. Immediately after turning the printer on, measure the voltage between pins 1 and 3 on the J1133 connector. If the voltage changes from 0 V to 12 V or 24 V, replace the power supply fan. 3. Replace the low-voltage power supply. 4. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
58.X **PRINTER ERROR** **For help press ?** alternates with **58.X** **PRINTER ERROR** **To continue** **turn off then on**	None	A memory tag error was detected. **X Description** 2 air temp sensor 3 CPU 4 power supply	1. Turn the printer off and then back on. 2. Replace the memory PCB. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
59.XY **PRINTER ERROR** **For help press ?** alternates with **59.XY** **PRINTER ERROR** **To continue** **turn off then on**	None	A printer motor error has occurred. **X Description** 0 motor error 1 motor startup error 2 motor rotation error 3 fuser motor startup error 4 fuser motor rotation error 5 print cartridge motor startup error 6 print cartridge motor rotation error 9 ETB motor startup error A ETB motor rotation error B developing disengaging motor startup error C developing disengaging motor rotation error **Y Description** 0 no color/black 1 cyan 2 magenta 3 yellow	1. Turn the printer off and then back on. 2. This message might also appear if the transfer unit is missing or incorrectly installed. Ensure that the transfer unit is correctly installed. **ETB motor error** 1. Clean the ETB unit intermediate connector, J36. If the connector is damaged, replace it. 2. Reconnect the connetors J38 for the ETB motor and J1111 on the DC controller PCB. 3. Replace the ETB motor. 4. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **Fuser motor error** 1. Reconnect the connectors J18 for the fuser motor and J1101 on the DC controller PCB. Replace any damaged parts. 2. Replace the fuser drive assembly. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
59.XY (continued) **PRINTER ERROR** **For help press ?** alternates with **59.XY** **PRINTER ERROR** **To continue** **turn off then on**	None		**Print cartridge motor error** 1. Reconnect the print cartridge connector on the DC controller PCB (J1124 for cyan, J1126 for magenta, J1125 for yellow, and J1127 for black). 2. Replace the drum drive assembly for the indicated print cartridge. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only). **Developing disengaging motor error** 1. Reconnect the connectors J16 for the developing disengaging motor and J1100 for the DC controller PCB. 2. Replace the developing disengaging drive assembly. 3. Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).
62 NO SYSTEM **To continue** **turn off then on**	None	No system was found.	1. Turn the printer off and then back on. 2. Reseat the firmware DIMM, making sure it is in the 168-pin slot J1.
64 PRINTER ERROR **For help press ?** alternates with **64 PRINTER ERROR** **To continue** **turn off then on**	None	Scan buffer error.	1. Turn the printer off and then back on. 2. Perform a cold reset. See Cold reset for instructions. 3. If the message persists, replace the formatter or firmware DIMM.

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
68.X PERMANENT **STORAGE ERROR** **For help press ?** alternates with **68.X PERMANENT** **STORAGE ERROR** **To continue press** **press ✔**	None	One or more printer settings saved in the non-volatile storage device is invalid and has been reset to its factory default. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. Check the printer settings to determine which settings have been changed.
68.X PERMANENT **STORAGE FULL** **For help press ?** alternates with **68.X PERMANENT** **STORAGE FULL** **To continue press** **press ✔**	None	A non-volatile storage device is full. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. For **68.0** errors, turn the printer off and then back on. 3. If a 68.0 error persists, execute an NVRAM inititialization. See NVRAM initialization. 4. For **68.1** errors, use the HP Web Jetadmin software to delete files from the disk drive. 5. If a 68.1 errors persists, reinitialize the hard disk. See Hard disk initialization.
68.X PERMANENT **STORAGE WRITE FAIL** **To continue press ✔**	None	A non-volatile storage device is failing to write. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 onboard NVRAM 1 removable disk (flash or hard)	1. Press ✔ to continue. 2. Turn the printer off and then back on. 3. If the problem persists, initialize NVRAM. See NVRAM initialization. 4. Reinitialize the hard disk. See Hard disk initialization.
79.XXXX **PRINTER ERROR** **To continue** **turn off then on**	None	A critical hardware error has occurred.	1. Turn the printer off and then back on. 2. If the problem persists, reseat the firmware DIMM. 3. Reseat the formatter. 4. Replace the firmware DIMM. 5. Replace the formatter. Calibrate the priner. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-5. Numerical printer messages (HP Color LaserJet 5550 models) (continued)

Control panel message	Event log error message	Description	Recommended action
8X.YYYY **EIO ERROR**	None	The EIO accessory card in slot X has encountered a critical error.	1. Turn the printer off and then back on. 2. If the problem persists, reseat the EIO card. 3. Replace the EIO card.

Replacement parts configuration (HP Color LaserJet 5550 models)

When the following parts are replaced, perform the procedures shown in this section.

- Both the formatter and the DC controller
- Formatter (new or previously installed in another printer)
- DC controller (new or previously installed in another printer)

NOTE The HP Color LaserJet 5550 models store printer configuration information in the flash memory card. Always print a configuration page before and after (wait five minutes after the printer power is turned on) installing these parts to verify that the printer configuration information is restored from the flash memory card to the NVRAM.

Both the formatter and DC controller

WARNING! Do *not* replace the formatter and the DC controller at the same time. If the formatter and DC controller must both be replaced, install a replacement formatter first and make sure to that you install the flash memory card from the removed formatter on the replacement formatter *before* you turn the printer power on.

If both the formatter and the DC controller need to be replaced, install the replacement formatter first. The HP Color LaserJet 5550 models store printer configuration information in the flash memory card. The flash memory card from the removed formatter *must* be installed on the replacement formatter, so that printer configuration information (for example, the duplexing option, page counts, and serial number) can be restored to the formatter and the DC controller. After replacing the formatter and installing the flash memory card, turn the printer power on. When the **Ready** message appears on the control panel display, you *must* wait five minutes before using the printer so that the printer configuration information can be restored from the flash memory card to the NVRAM.

Then replace the DC controller. Turn the printer power off, and replace the DC controller. Turn the printer power on. When the **Ready** message appears on the control panel display, wait five minutes before using the printer so that the printer configuration information can be restored from the flash memory card to the NVRAM.

After installing the replacement formatter and DC controller, perform a full calibration procedure three times. See the Print quality menu table.

Formatter (new or previously installed in another printer)

The HP Color LaserJet 5550 models store printer configuration information in the flash memory card. The flash memory card from the removed formatter *must* be installed on the replacement formatter, so that printer configuration information (for example, the duplexing option, page counts, and serial number) can be restored to the formatter and DC controller. After replacing the formatter and installing the flash memory card, turn the printer power on. When the **Ready** message appears on the control panel display, you *must* wait five minutes before using the printer so that the printer configuration information can be restored from the flash memory card to the NVRAM.

NOTE The transfer kit page count is not reset by replacing the formatter.

After installing the replacement formatter, perform a full calibration procedure three times. See the Print quality menu table.

DC controller (new or previously installed in another printer)

After replacing the DC controller, turn the printer power on. When the **Ready** message appears on the control panel display, you *must* wait five minutes before using the printer so that the printer configuration information (for example, the duplexing option, page counts, and serial number) can be restored from the flash memory card to the NVRAM.

After installing the replacement DC controller, perform a quick calibration procedure three times.See the Print quality menu table.

Paper path troubleshooting

Jams

Jam error messages occur if paper fails to arrive at or clear the paper path sensors in the allowed time. Dedicated paper sensors detect whether paper is present in the sensor and if paper is fed normally. When the DC controller detects a jam, it immediately stops the printing process and displays the appropriate jam message for the sensor that detects the jam.

Jam locations

Jams occur in the areas shown in Figure 7-3. Jam locations. Jam messages correlate with these areas. For instructions on clearing jams, see the sections later in this chapter.

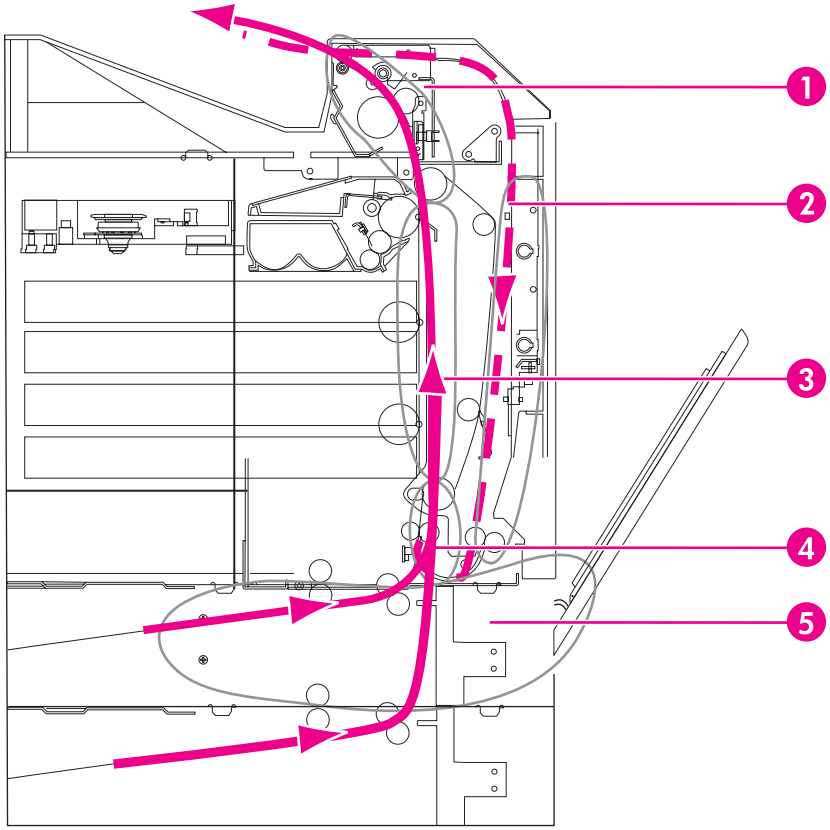


Figure 7-3. Jam locations

1 Top cover area
2 Duplex path
3 Paper path
4 Paper input path
5 Trays

Jam locations by error message

Use Table 7-6. Error messages and associated jam locations to help pinpoint and clear specific paper jams. See Figure 7-3. Jam locations for jam locations.

Table 7-6. Error messages and associated jam locations

Control panel message	Event log error message	Description	Recommended action
13.01.YY JAM IN TRAY X	None	Jam location 5	Media is delayed in the feed area of the specified tray. 1. Open the covers and the ETB. 2. Pull media by both corners to remove it.
13.02.YY JAM IN TRAY X	None	Jam location 5	Media is stuck in the feed area of the specified tray. 1. Open the covers and the ETB. 2. Pull media by both corners to remove it.
13.05.YY JAM IN TRAY X	None	Jam location 3	Media is delayed in the paper input path or has not reached the fuser paper sensor in the expected time. 1. Open the covers and the ETB. 2. Pull media by both corners to remove it.
13.09.YY JAM IN TOP COVER AREA	None	Jam location 1	Media has crumpled into an accordion fold as it enters the fuser. 1. Open the top cover. **WARNING!** The fuser is hot, wait 10 minutes for it to cool down. 2. Pull forward on the two green handles on either side of the fuser to disengage the fuser rollers. 3. Open the fuser cover, and remove the media. 4. Press back on the two green handles on either side of the fuser to re-engage the fuser rollers.

Table 7-6. Error messages and associated jam locations (continued)

Control panel message	Event log error message	Description	Recommended action
13.0A.YY JAM IN TOP COVER AREA	None	Jam location 1	During a duplex print job, media was delayed in the output bin before it entered the duplex path. 1. Open the top cover. **WARNING!** The fuser is hot, wait 10 minutes for it to cool down. 2. Pull forward on the two green handles on either side of the fuser to disengage the fuser rollers. 3. Open the fuser cover, and remove the media. 4. Press back on the two green handles on either side of the fuser to re-engage the fuser rollers.
13.12.YY JAM IN DUPLEX PATH	None	Jam location 2	During a duplex print job, media was removed from the output bin before it entered the duplex path, or media has entered the duplex path, but it is stuck. 1. Open the top cover and the front cover. (Do not open the ETB.) 2. Pull media by both corners to remove it.
13.21.YY JAM IN DUPLEX PATH	None	Jam location 3	One of the covers is not completely closed. Ensure both covers are closed before printing. 1. Open the covers and the ETB. 2. Pull media by both corners to remove it.

Jam recovery

This option allows you to configure the printer response to paper jams, including how it handles the pages involved. **AUTO** is the default value.

- **AUTO**—The printer automatically turns jam recovery on when sufficient memory is available.
- **ON**—The printer reprints any page involved in a paper jam. Additional memory is allocated to store the last few pages printed, and this might cause overall printer performance to suffer.
- **OFF**—The printer will not reprint any page that was involved in a paper jam. Since no memory is used to store the most recent pages, performance might be optimal.

To set jam recovery response

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▲ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▲ to highlight **JAM RECOVERY**.
7. Press ✔ to select **JAM RECOVERY**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✔ to set the selection.
10. Press MENU.

Avoiding paper jams

Table 7-7. Common causes of paper jams lists common causes of paper jams and suggests solutions for resolving them.

Table 7-7. Common causes of paper jams

Common causes of paper jams

Cause	Solution
Print media does not meet HP-recommended media specifications.	Use only media that meets HP specifications. See Table 1-17. Tray 1 (multi-purpose tray) supported media specifications.
A supply item is installed incorrectly, causing repeated jams.	Verify that all print cartridges, the ETB, and the fuser are correctly installed.
You are reloading paper that has already passed through a printer or copier.	Do not use media that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess media from the input tray. Press media down in the input tray so it fits below the tabs and within the media width guides.
Print media is skewed.	Input tray guides are not adjusted correctly. Adjust input tray guides so they hold media firmly in place without bending it. If media heavier than 200 g/m^2 (53 lb) is loaded into Tray 2, Tray 3, Tray 4, or Tray 5 (for the 5550 model), the media might skew.
Print media is binding or sticking together.	Remove media, flex it, rotate it 180 degrees, or flip it over. Reload media into the input tray. Do not fan media.
Print media is removed before it settles into the output bin.	Reset the printer. Wait until the page completely settles in the output bin before removing it.

Table 7-7. Common causes of paper jams (continued)

Common causes of paper jams

Cause	Solution
When duplexing, the print media is removed before the second side of the document is printed.	Reset the printer and print the document again. Wait until the page completely settles in the output bin before removing it.
Print media is in poor condition.	Replace the print media.
Print media is not picked up by the internal rollers from Tray 2, Tray 3, Tray 4, or Tray 5 (5550 model).	Remove the top sheet of media. If the media is heavier than 163 g/m^2 (43 lb), it may not be picked from the tray.
Print media has rough or jagged edges.	Replace the media.
Print media is perforated or embossed.	This media does not separate easily. You might need to feed single sheets from Tray 1.
Printer supply items have reached the end of their useful life.	Check the printer control panel for messages prompting you to replace supplies, or print a supplies status page to verify the remaining life of the supplies.
Media was not stored correctly.	Replace the print media. Media should be stored in the original packaging in a controlled environment.

Persistent jams

If jams occur repeatedly, use the information in this section to diagnose the root cause of the problem. The tables in this section list possible causes and recommended solutions for jams in each area of the paper path. Items are listed in the order you should investigate. In general, items at the beginning of the list are relatively minor repairs. Items at the end of the list are more significant repairs.

Basic troubleshooting for paper jams

The basic troubleshooting process for paper jams consists of the following:

1. Gather data.
2. Identify the cause of the problem.
3. Fix the problem.

Data collection

To troubleshoot paper jams, gather the following information:

- The exact paper jam error code displayed on the control panel
- The location of the leading edge of the paper in the paper path
- Whether paper is in the paper path when the jam occurs, or if paper is stuck in the input tray
- Whether the jam occurs at power-up or while paper is moving

- Whether the paper is damaged, and if it is, where the damage occurs on the paper and where in the paper path the paper stops
- Whether the jam occurs when feeding from one particular tray
- Whether the jam occurs only when duplex printing
- Whether a particular type of paper is jamming or not jamming
- Whether any of the supplies are non-HP (non-HP supplies are known to cause paper jams)
- Whether the customer is storing the paper in correctly, overloading the trays, damaging the edge of the paper during loading, or using paper that has already been fed through the printer

General paper path troubleshooting

Use the following suggestions to isolate the cause of the problem. Once you have identified the cause, use the tables that follow to find a recommended solution.

NOTE

Use the paper path test in the Diagnostics menu to print pages while troubleshooting. See Paper path test (HP Color LaserJet 5500 models) for information about the paper path test.

- View or print the event log and determine if a particular jam error occurs more often than others. Try to identify a pattern.
- From the event log, determine the frequency of a particular jam. If a jam occurs repeatedly around the same page count, consider this a single jam that the customer tried to clear.
- Try printing from all available input trays to identify whether the problem is isolated to one tray.
- Print the job in both simplex and duplex modes to identify if the problem occurs only in one mode or the other.
- Try printing on paper from an unopened ream that has been stored correctly. If the jam does not occur with this media, then the customer's media might be causing the problem.
- If the jam occurs from when the printer is turned on, check the paper path for small torn pieces of paper. Also check for broken sensors or flags, and check for loose or defective connections.
- If the paper is torn, folded, or wrinkled (typically along the leading edge), inspect the paper path for items that could be causing the damage.
- If the customer is using non-HP supplies, try replacing those supplies with genuine HP supplies to see if the problem goes away.
- If necessary, instruct the customer on proper media storage, correct loading technique, and printer operation. Make sure the customer knows not to grab paper in the output bin during duplex printing.

Paper path checklist

- Verify that media is correctly loaded in the input trays and that all length and width guides are set correctly.
- Clean the printer. Toner and paper dust in the paper path can inhibit free movement of media through the printer and can block the sensors.

- Use the paper path test in the Diagnostic menu to vary the input selections of the printer to determine if the problem is associated with a particular area of the printer.
- Worn rollers or separation pads can cause multifeeds. Check the condition of the pickup rollers and separation pads. Bent separation tabs (on the front corners of the input trays) can cause misfeeds and multifeeds. Replace the tray if necessary.
- Defective paper tray switches can cause jams by communicating the wrong paper size to the formatter.
- Defective paper sensors along the paper path might signal a false jam.
- Scraps of media left in the paper path can cause intermittent jams. Always check that the paper path is clear when cleaning the printer and when clearing jams. Also, remove the fuser and carefully check it for jam debris.

Table 7-8. Jams in Tray 1

Causes for jams in Tray 1

Cause	Solution
Pickup roller is dirty, worn, or damaged.	Clean the pickup roller. If it is still dirty after cleaning, or if it is worn or damaged, replace the pickup roller.
Separation pad is defective.	Clean the separation pad. If it is still dirty after cleaning, or if it is worn or damaged, replace the separation pad.
Drive gears are damaged.	Check the drive gears in the paper pickup unit. Replace the pickup drive assembly if the gears are damaged.
Multi-purpose tray pickup solenoid is defective.	1. Disconnect the connector J25 for the multi-purpose tray pickup solenoid from the DC controller PCB. 2. Measure the resistance between the cable-side connectors J25-1 and J25-2. 3. If the measured resistance is NOT about 108 ohms, replace the multi-purpose tray pickup solenoid.
Pickup motor is defective.	Replace the paper pickup drive assembly.
Paper pickup assembly is defective.	Replace the paper pickup assembly.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-9. Jams in Tray 2

Causes for jams in Tray 2

Cause	Solution
Pickup roller, separation roller, or feed roller in the paper cassette is deformed.	If any one of these rollers is damaged, replace all three rollers together.
Drive gears are damaged.	Check the drive gears in the paper pickup unit. Replace the pickup drive assembly if the gears are damaged.
Cassette pickup clutch is damaged.	1. Disconnect the connector J24 for the cassette pickup clutch. 2. Measure the resistance between the cable-side connectors J24-1 and J24-2. 3. If the measured resistance is NOT about 206 ohms, replace the cassette pickup clutch.
Paper stack surface sensor is defective.	Replace the cassette sensor PCB.
Pickup motor is defective.	Replace the paper pickup drive assembly.
Paper pickup assembly is defective.	Replace the paper pickup assembly.
Lifting plate or lifter drive mechanism in the cassette is defective.	Replace the cassette or the lifter drive assembly.
Lifter motor is defective.	Replace the lifter motor.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-10. Jams in Tray 3, Tray 4, or Tray 5 (HP Color LaserJet 5550 models only)

Causes for jams in Tray 3, Tray 4, or Tray 5 (HP Color LaserJet 5550models only)

Cause	Solution
Pickup roller, separation roller, or feed roller in the paper cassette is deformed.	If any one of these rollers is damaged, replace all three rollers together.
Drive gears are damaged.	Check the drive gears in the paper pickup unit. Replace the pickup drive assembly if the gears are damaged.
Connector to the printer has poor contact.	Reconnect all connectors to the printer. Replace any damaged connectors.

Table 7-10. Jams in Tray 3, Tray 4, or Tray 5 (HP Color LaserJet 5550 models only) (continued)

Causes for jams in Tray 3, Tray 4, or Tray 5 (HP Color LaserJet 5550models only)

Cause	Solution
Cassette pickup clutch is damaged.	1. Disconnect the connector J24 for the cassette pickup clutch. 2. Measure the resistance between the cable-side connectors J24-1 and J24-2. 3. If the measured resistance is NOT about 206 ohms, replace the cassette pickup clutch.
Paper stack surface sensor is defective.	Replace the cassette sensor PCB.
Pickup motor is defective.	Replace the paper pickup drive assembly.
Paper pickup assembly is defective.	Replace the paper pickup assembly.
Lifting plate or lifter drive mechanism in the Tray 3 or Tray 4 cassette is defective.	Replace the cassette, or the lifter drive assembly.
Lifting plate or lifter drive mechanism in the Tray 2 cassette is defective.	Replace the cassette.
Paper feeder PCB is defective.	Replace the paper feeder PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-11. Jams in the paper path

Causes for jams in the paper path

Cause	Solution
Registration shutter is defective. (This applies to jams that occur before the registration roller.)	Make sure the shutter is clean, moves smoothly, and that the spring is in place. If the shutter is damaged, replace the paper pickup assembly.
Drive gears are damaged. (This applies to jams that occur before the registration roller.)	Check the drive gears in the paper pickup unit. Replace the pickup drive assembly if the gears are damaged.
Registration roller and registration sub roller are dirty, worn, or damaged. (This applies to jams that occur before the registration roller.)	Clean the registration roller or registration sub roller if it is dirty. If it is still dirty after cleaning, or if it is worn or damaged, replace the paper pickup assembly.
Attaching roller is damaged. (This applies to jams in which paper is crumpled into an accordion as it enters the ETB.)	Check if the attaching roller is damaged. If it is damaged, replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-11. Jams in the paper path (continued)

Causes for jams in the paper path

Cause	Solution
Cartridge shutter open/close mechanism is damaged. (This applies to jams in which paper is crumpled into an accordion fold somewhere on the ETB belt.)	The shutters in each print cartridge should open as you close the ETB. If a shutter does not open, reseat that cartridge. Replace the cartridge if necessary. Also check for a damaged shutter mechanism in the printer.
Cartridge drive motor assembly is damaged.	Inspect the cartridge drive assembly in each print cartridge. If any are damaged, replace the assembly for that print cartridge.
Attaching roller is defective.	Make sure the attaching roller is clean and the spring is in place. If the roller is damaged, replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
Top of page sensor is defective.	Replace the multi-purpose tray sensor PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-12. Jams in the top cover

Causes for jams in the top cover

Cause	Solution
Fuser paper sensor or sensor lever is defective.	Make sure the fuser paper sensor lever moves smoothly and is set in place. Replace the lever if it is damaged. Replace the sensor if it is defective.
Fuser sleeve or pressure roller does not rotate smoothly.	If the fuser drive gears are worn or damaged, replace the fuser.
Fuser inlet guide is dirty or has built-up toner.	Clean the fuser inlet guide.
Fuser sleeve or pressure roller is dirty, worn, or damaged.	Clean the fuser sleeve or pressure roller. If it is damaged, replace the fuser.
Fuser delivery sensor or sensor lever is defective.	Make sure the fuser delivery sensor lever moves smoothly and is set in place. Replace the lever if it is damaged. Replace the sensor if it is defective.
Fuser delivery roller is worn.	Replace the fuser.
Fuser delivery roller drive gears are worn or damaged.	Replace the fuser.
Face-down delivery roller is defective.	Replace the fuser.
Fuser nip width is does not meet specification.	Replace the fuser.

Table 7-12. Jams in the top cover (continued)

Causes for jams in the top cover

Cause	Solution
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-13. Jams in the duplex path

Causes for jams in the duplex path

Cause	Solution
Media does not meet specifications.	Make sure the media meets specifications for duplex printing and that the media has been stored correctly.
Duplex feed guides or duplex feed rollers are dirty.	Clean the rollers with a damp, lint-free cloth. Remove any debris from the duplex feed guide.
Duplex feed rollers are worn or damaged.	Replace the ETB unit. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
Duplex feed roller drive gears are worn or damaged.	Replace the ETB unit. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
Duplex feed guides are damaged.	Check the top cover and front cover guides, and replace the covers if necessary. Replace the ETB unit. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
Timing belts are defective.	Replace the ETB unit. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).

Paper transport troubleshooting

If media is feeding incorrectly, use the information in this section to identify and resolve the problem.

Table 7-14. Multiple pages are fed

Causes for multiple pages feeding

Cause	Solution
Pickup roller, feed roller, or separation roller in the paper cassette is deformed.	If any one of these rollers is damaged, replace all three rollers together.
Multi-purpose tray separation pad is worn.	Replace the separation pad assembly.
Multi-purpose tray separation pad has a defective spring.	Make sure the spring is set in place. If the spring is damaged, replace the separation pad assembly.
Separation roller is not rotating correctly.	Replace the paper pickup unit or the cassette.

Paper is wrinkled or folded

Verify that the media meets paper weight and tray specifications for the media.

To diagnose the cause of wrinkled or folded paper, use the Print/Stop test in the Diagnostics menu. Adjust the stop time so the paper stops before it enters the fuser. Open the ETB. If paper is wrinkled at this stage, use Table 7-16. Causes for wrinkled or folded paper (part two, paper path exit) to diagnose the problem. If paper is *not* wrinkled at this stage, use Table 7-15. Causes for wrinkled or folded paper (part one, paper path entrance) to diagnose the problem. See Print/Stop test for more information on the Print/Stop test.

Table 7-15. Causes for wrinkled or folded paper (part one, paper path entrance)

Causes for wrinkled or folded paper (part one, paper path entrance)

Cause	Solution
Registration shutter is defective.	Make sure the registration shutter is clean and moves smoothly. If the registration shutter is worn or damaged, replace the paper pickup assembly.
Registration roller or sub registration roller is dirty or defective.	Replace the paper pickup assembly.
Paper path has foreign substances or dirt.	Remove any foreign substances or dirt from the paper path. If the feed guide is damaged, replace the paper pickup assembly.

Table 7-15. Causes for wrinkled or folded paper (part one, paper path entrance) (continued)

Causes for wrinkled or folded paper (part one, paper path entrance)

Cause	Solution
Cartridge shutter open/close mechanism is damaged. (This applies to jams in which paper is crumpled into an accordion fold somewhere on the ETB belt.)	The shutters in each print cartridge should open as you close the ETB. If a shutter does not open, reseat that cartridge. Replace the cartridge if necessary. Also check for a damaged shutter mechanism in the printer.

Table 7-16. Causes for wrinkled or folded paper (part two, paper path exit)

Causes for wrinkled or folded paper (part two, paper path exit)

Cause	Solution
Fuser inlet guide is dirty.	Clean the fuser inlet guide.
Fuser pressure roller is dirty or damaged.	Clean the pressure roller. If the pressure roller is damaged, replace the fuser.
Fuser sleeve is dirty or damaged.	Clean the fuser sleeve. If the fuser sleeve is damaged, replace the fuser.
Fuser delivery roller is dirty.	Clean the fuser delivery roller.

Table 7-17. Paper is skewed

Causes for skewed paper

Cause	Solution
Paper dust or dirt has accumulated in the cassette feed roller or registration roller.	Clean the rollers.
Cassette feed roller and registration roller are worn irregularly.	Replace the paper pickup assembly.
Pickup roller, separation roller, or feed roller in the paper cassette is deformed.	If any one of these rollers is damaged, replace all three rollers together.
Registration shutter is defective.	Make sure the registration shutter moves smoothly, its spring is in place, and it is clean. If the registration shutter is damaged, replace the paper pickup assembly.

Image formation troubleshooting

The image formation system is the central hub of the printer. During image formation, an image of colored toner is formed and then fused onto the paper. The image formation system consists of the following physical components:

- Four laser scanners
- Four print cartridges
- ETB
- Fuser

Before beginning image formation troubleshooting, check that the media meets the specifications listed in the *HP LaserJet Printer Family Print Media Specifications Guide.*

Print quality problems associated with media

Some print quality problems arise from use of inappropriate media.

- Use paper that meets HP paper specifications. See Table 1-17. Tray 1 (multi-purpose tray) supported media specifications.
- The surface of the media is too smooth. Use media that meets HP paper specifications. See Table 1-17. Tray 1 (multi-purpose tray) supported media specifications.
- The driver/printer is set incorrectly. Change the paper type setting to **heavy** or **glossy**.
- The media you are using is too heavy for the printer, and the toner is not fusing to the media.
- The transparencies you are using are not designed for proper toner adhesion. Use only transparencies designed for HP Color LaserJet printers.
- The moisture content of the paper is uneven, too high, or too low. Use paper from a different source or from an unopened ream of paper.
- Some areas of the paper reject toner. Use paper from a different source or from an unopened ream of paper.
- The letterhead you are using is printed on rough paper. Use a smoother, xerographic paper. If this solves your problem, consult with the printer of your letterhead to verify that the paper used meets the specifications for this printer.
- The paper is excessively rough. Use a smoother, xerographic paper.

Overhead transparency defects

Overhead transparencies may display any of the image quality problems that any other type of media will cause, as well as defects specific to printing on transparencies. In addition, because transparencies are pliable while in the print path, they are subject to being marked by the media-handling components.

NOTE Allow transparencies to cool at least 30 seconds before handling them.

- In the printer driver's **Paper** tab, select **Transparency** as the media type. Also, make sure that the tray is correctly configured for transparencies.
- Check that the transparencies meet the specifications for this printer. For more information, consult the *HP LaserJet Printer Family Print Media Specifications Guide*.

- Handle transparencies by the edges. Skin oil on the surface of transparencies can cause spots and smudges.
- Small, random dark areas on the trailing edge of solid fill pages may be caused by transparencies sticking together in the output bin. Try printing the job in smaller batches.
- The selected colors are undesirable when printed. Select different colors in the software application or printer driver.
- If you are using a reflective overhead projector, use a standard overhead projector instead.

Print quality problems associated with the environment

- The printer is operating in excessively humid or dry conditions. Verify that the printing environment is within specifications.

Print quality problems associated with jams

- Make sure that all media is cleared from the paper path.
- The printer recently jammed. Print two to three pages to clean the printer.
- The media does not pass through the fuser causing image defects to appear on subsequent documents. Print two to three pages to clean the printer. However, if the problem persists see the next section.

Print quality troubleshooting pages

The print quality troubleshooting pages provide information on aspects of the printer that affect print quality.

1. Press ✔ MENU to enter the **MENUS** for the HP Color LaserJet 5500 or press MENU to enter the **MENUS** for the HP Color LaserJet 5550.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PQ TROUBLESHOOTING**.
5. Press ✔ to select **PQ TROUBLESHOOTING**.

The message **Printing... PQ troubleshooting** appears on the display until the printer finishes printing the print quality troubleshooting information. The printer returns to the **Ready** state after printing the print quality troubleshooting information.

The print quality troubleshooting information includes one page for each color (cyan, magenta, yellow, and black), printer statistics related to print quality, instructions on interpreting the information, and procedures to solve print quality problems.

If following the procedures recommended by the print quality troubleshooting pages do not improve print quality, go to http://www.hp.com/support/clj5500 for the HP Color LaserJet 5500 or http://www.hp.com/support/clj5550 for the HP Color LaserJet 5550.

Understanding color variations

The printed output might not match the computer screen, and the colors printed on successive pages might not match. While color variations are inherent in this printing method, they can indicate changes in the printing environment, print media, or printer components.

Print quality troubleshooting tool

The print quality troubleshooting tool is available to users and service personnel to help identify and troubleshoot print quality issues for the HP Color LaserJet 5500 and HP Color LaserJet 5550 printers. The tool is designed to provide intuitive, step-by-step instructions for printing PQ troubleshooting pages. It suggests solutions for eight print quality issues using standard images to ensure that the support agent and the user have a common diagnostic method for isolating the print quality issue.

The print quality troubleshooting tool is available at the following Web sites:

- http://www.hp.com/go/printquality/clj5550
- http://www.hp.com/cpso-support-new/pg/5550/5550home.html
- http://www.hp.com/bizsupport (Find the print quality tool under **Hot Topics**.)

You can also access the print quality troubleshooting tool by going to hp.com and following these steps.

1. From the Main page, click **Support & Drivers**.
2. In the open text field, type `CLJ5550` and click the forward arrows.
3. In the box on the right side of the screen, under **Hot Topics**, click **print quality troubleshooting tool**.

Common causes of color variation

The following list outlines the major causes of color variations between computers, applications, and output devices.

- Halftone patterns produced on monitors and the types of patterns used in the print jobs are different and might cause variations in the printed output.
- The printed output differs from the image on the monitor because the monitor and the print media have different reference values of black and white. The monitor screen has charcoal gray for the black level, and the white on the monitor screen is actually blue. Black on the print media is limited only by the fill capability of the printer, and most good quality paper has a very high white level. In addition, phosphor (used in color monitors) and toner have entirely different spectra characteristics and different color-rendering capabilities. Differences between output are common. Blues generally match better than reds.
- The color of the ambient light changes the perception of color. Fluorescent light lacks many colors present in incandescent light, and the color range of natural light is broader than any artificial light. When comparing color, choose a standard light source for reference and understand that the perceived color will change as the light changes.
- Long-term color variations occur as paper ages. Use high-quality paper and protect the paper from sunlight to help minimize discoloration.
- Environmental changes can cause color variation. The development process places a high potential across an air gap to attract toner to the imaging drum. Changes in relative humidity vary the point at which the toner travels to the imaging drum.

- All consumable components have a finite life span. As these components reach the end of their useful life, their ability to produce consistent print quality diminishes.
- Paper roughness can cause colors to look different. Use standard paper.

Color selection process

The user selects the color in the application, but the operating system might convert or modify some characteristics of the color before sending the information to the printer driver. The printer driver might also modify color characteristics depending upon the selected output mode.

Any color characteristics not addressed by the printer driver or applications are set to the printer default. The default color might not match the color the user selected.

Matching colors

The user can match colors using Pantone® color matching systems or swatch book color matching.

PANTONE®* color matching

PANTONE®* has multiple color matching systems. PANTONE®* Matching System is very popular and uses solid inks to generate a wide range of color hues and tints. See http://www.hp.com for details on how to use PANTONE®* Matching System with this printer.

Swatch book color matching

The process for matching printer output to preprinted swatch books and standard color references is complex. In general, you can obtain a reasonably good match to a swatch book if the inks used to create the swatch book are cyan, magenta, yellow, and black. These are usually referred to as process color swatch books.

Some swatch books are created from spot colors. Spot colors are specially created colorants. Many of these spot colors are outside of the gamut of the printer. Most spot color swatch books have companion process swatch books that provide CMYK approximations to the spot color.

Most process swatch books will have a note on what process standards were used to print the swatch book. In most cases they will be SWOP, EURO, or DIC. To get optimal color matching to the process swatch book, select the corresponding ink emulation from the printer menu. If you cannot identify the process standard, use SWOP ink emulation.

Using color

This section includes information on ways to produce the best possible color prints.

HP ImageREt 3600

HP ImageREt 3600 is a technology that provides you with the best color print quality without having to change driver settings or make trade-offs between print quality, performance, and memory. HP ImageREt 3600 produces photorealistic images.

HP ImageREt 3600 provides 3600 dpi color laser-class quality through a multilevel printing process. This process precisely controls color by combining up to four colors within a single dot and by varying the amount of toner in a given area. As a result, ImageREt 3600, together with the 600-by-600 dpi engine resolution, creates millions of smooth colors.

Paper selection

For the best color and image quality, select the appropriate media type from the printer menu or from the front panel.

sRGB

Standard red-green-blue (sRGB) is a world-wide color standard originally developed by HP and Microsoft as a common color language for monitors, input devices (scanners, digital cameras), and output devices (printers, plotters). It is the default color space used for HP products, Microsoft operating systems, the World Wide Web, and most office software sold today. sRGB is representative of the typical Windows PC monitor today and the convergence standard for high-definition television.

The latest versions of Adobe PhotoShop, CorelDRAW™, Microsoft Office, and many other applications use sRGB to communicate color. Most importantly, as the default color space in Microsoft operating systems, sRGB has gained broad adoption as a means to exchange color information between applications and devices using a common definition that assures typical users will experience greatly improved color matching. sRGB improves your ability to match colors between the printer, the PC monitor and other input devices (scanner, digital camera) automatically, without the need to become a color expert.

Color options

Color options enable optimal color output automatically for diverse types of documents.

Color options use object tagging, which allows optimal color and halftone settings to be used for different objects (text, graphics, and photos) on a page. The printer driver determines which objects are used on a page and uses halftone and color settings that provide the best print quality for each object. Object tagging, combined with optimized default settings, produces great color out of the box.

In the Windows environment, the **Automatic** and **Manual** color options are on the **Color** tab in the printer driver.

Setting color options to **Automatic** will typically produce the best possible print quality for color documents. However, there may be cases when you want to print a color document in grayscale (black and white) or wish to change one of the printer's color options.

- Using Windows, print in grayscale or change the color options using settings found on the **Color** tab in the printer driver.
- Using a Macintosh computer, print in grayscale or change the color options using the **Color Matching** pop-up menu in the **Print** dialog box.

Print in Grayscale

Selecting the **Print in Grayscale** option from the printer driver prints a document in black and white. This option is useful for previewing preliminary copies of slides and hardcopy output, or for printing color documents that will be photocopied or faxed.

Automatic or manual color adjustment

The **Automatic** color adjustment option optimizes the neutral gray color treatment, halftones, and edge enhancements used for each element in a document. For more information, see your printer driver online Help.

NOTE Automatic is the default setting and is recommended for printing all color documents.

The **Manual** color adjustment option allows you to adjust the neutral gray color treatment, halftones, and edge enhancements for text, graphics and photographs. To access the Manual color options, from the **Color** tab, select **Manual**, then **Settings**.

Manual color options

Manual color adjustment allows you to adjust the Color (or Color Map) and Halftone options individually for text, graphics, and photographs.

NOTE Some applications convert text or graphics to raster images. In these cases, the **Photographs** settings will also control text and graphics.

Halftone options

Halftone options affect the resolution and clarity of your color output. You can select halftone settings for text, graphics, and photographs independently. The two halftone options are **Smooth** and **Detail**.

- The **Smooth** option provides better results for large, solid-filled print areas. It also enhances photographs by smoothing out fine color gradations. Choose this option when uniform and smooth area fills are top priority.
- The **Detail** option is useful for text and graphics that require sharp distinctions among lines or colors, or images that contain a pattern or a high level of detail. Choose this option when sharp edges and details are top priority.

Neutral Grays

The **Neutral Grays** setting determines the method used for creating gray colors used in text, graphics, and photographs.

Two values are available for the **Neutral Grays** setting:

- **Black Only** generates neutral colors (grays and black) using only black toner. This guarantees neutrals colors without a color cast.
- **4-Color** generates neutral colors (grays and black) by combining all four toner colors. This method produces smoother gradients and transitions to non-neutral colors, and it produces the darkest black.

Edge Control

The **Edge Control** setting determines how edges are rendered. Edge control has two components: adaptive halftoning and trapping. Adaptive halftoning increases edge sharpness. Trapping reduces the effect of incorrect color plane registration by overlapping the edges of adjacent objects slightly.

Four levels of edge control are available:

- **Maximum** is the most aggressive trapping setting. Adaptive halftoning is on for this setting.
- **Normal** is the default trapping setting. Trapping is at a medium level and adaptive halftoning is on.
- **Light** sets trapping at a minimal level, and adaptive halftoning is on.
- **Off** turns off both trapping and adaptive halftoning.

RGB Color

Two values are available for the **RGB Color** setting:

- **Default** instructs the printer to interpret RGB color as sRGB. sRGB is the accepted standard of Microsoft and the World Wide Web Organization (www).
- **Vivid** instructs the printer to increase the color saturation in the midtones so that colored objects appear more colorful. Printed blues and greens will likely appear darker than on your monitor. This option is good for business graphics or for producing colors similar to the HP Color LaserJet 4550.
- **Device** instructs the printer to print RGB data in raw device mode. To render photographs properly with this selection, you must manage image color in the application or operating system.

Adjusting color balance

This printer features automatic color calibration to provide high-quality color output. In situations that require critical color control, you can manually adjust the density balance of the printer's four toner colors. The available range for each color is from -5 to +5. The default value is 0.

CAUTION This procedure should only be performed by your network administrator. Performing this procedure changes the color balance of the printer by altering halftones and affects all print jobs.

To adjust color density

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ or ▲ to highlight **ADJUST COLOR**.
7. Press ▼ or ▲ to highlight the desired color.
8. Press ✔ to select the desired color.
9. Press ▼ or▲ to highlight the correct density setting.
10. Press ✔ to select the density setting.
11. Press ⮌ to set the density for the next color.
12. After setting the density for each color, press PAUSE/RESUME (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550).

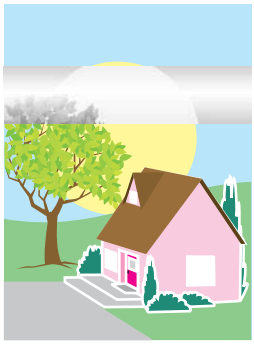
Print quality defect chart

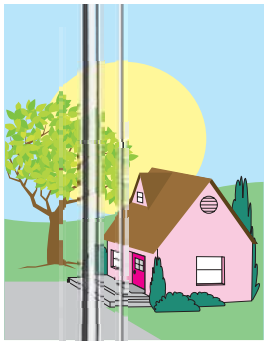
Use the examples in the print quality defect chart to determine which print-quality problem you are experiencing, and then see the corresponding pages to find information that can help you troubleshoot the problem. For the latest information and problem-solving procedures, go to http://www.hp.com/support/clj5500 or http://www.hp.com/support/clj5550.

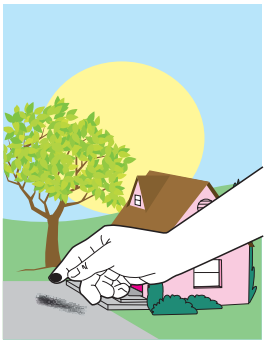
NOTE

The print-quality defect chart assumes the use of letter- or A4-size media that has moved through the printer long-edge first.

An image with no defects

	**Horizontal lines or streaks** • Make sure that the operation and location requirements of the printer are met. • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.		**Misaligned colors** • Request a **FULL CALIBRATE NOW** using the printer control panel (see Image formation troubleshooting). • Verify that the media does not exceed the maximum weight supported (see Image formation troubleshooting).

	**Vertical lines** • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.		**Repetitive defects** • Make sure that the operation and location requirements of the printer are met. • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.
	Color fade in all colors • Make sure that the operation and location requirements of the printer are met. • Calibrate the printer.		**Color fade in one color** • Make sure that the operation and location requirements of the printer are met. • Calibrate the printer. • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

	Fingerprints and media dents • Make sure to use supported media. • Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances. • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.		**Loose toner** • Make sure that the operation and location requirements of the printer are met. • Make sure to use supported media. • Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using. • Make sure that the media is loaded correctly, the size guides are touching the edges of the stack of media, and the custom-media switch is set appropriately. Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.

	Smeared toner • Make sure to use supported media. • A paper fragment was left in the printer when clearing a jam. Remove any paper fragments (see Image formation troubleshooting.)		**White areas (dropouts) on page** • Make sure that the operation and location requirements of the printer are met. • Make sure to use supported media. • Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances. • Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using. • Calibrate the printer. • Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

	Media damage (wrinkles, curl, creases, tears)
	• Make sure that the operation and location requirements of the printer are met.
	• Make sure to use supported media.
	• Make sure that the media is loaded correctly.
	• Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
	• Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.
	• Make sure that the following supplies are seated correctly:
	  ◦ fuser
	  ◦ transfer belt
	• Inspect the jam areas and remove any undetected jammed or torn media.
			Specks or stray toner
			• Make sure that the operation and location requirements of the printer are met.
			• Make sure to use supported media.
			• Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
			• Calibrate the printer.
			• Print the Print Quality Troubleshooting Pages (see Image formation troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

	Skewed, stretched, or off-center page
	• Make sure that the operation and location requirements of the printer are met.
	• Make sure to use supported media.
	• Make sure that the media is loaded correctly.
	• For problems with page skew, turn over the stack of media and rotate the stack 180 degrees.
	• Make sure that the following supplies are seated correctly:
	  • fuser
	  • transfer belt
	• Inspect the jam areas and remove any undetected jammed or torn media.		

Image defects

If specific defects occur repeatedly, print a Print Quality Troubleshooting page and follow the instructions on the page. If you are unable to resolve the problem, use the information in this section to identify the root cause of the problem.

Image defects fall into the categories listed in Table 7-18. Image defects. Possible causes and recommended solutions for each of these categories are listed in the tables that follow. In general, the items are listed in order from minor repairs to major repairs. Check the items in the order in which they appear.

Table 7-18. Image defects

Image defect	Description	More information
Light image	A very light image is printed.	See Table 7-19. Causes for light images.
Light color	One color is light in an image.	See Table 7-20. Causes for one color printing light.
Dark image	A very dark image is printed.	See Table 7-21. Causes for dark images.
Dark color	One color is dark in an image.	See Table 7-22. Causes for one color printing dark.
Completely blank	No image is printed.	See Table 7-23. Causes for a completely blank image.
All black/solid color	An all black or solid colored image is printed.	See Table 7-24. Causes for an all black or solid colored image.
Dots in vertical lines	Vertical lines of white dots appear in the image.	See Table 7-25. Causes for vertical lines of white dots.
Dirt on back of paper	The back (non-printed) side of the paper is dirty.	See Table 7-26. Causes for dirt on the back of the paper.
Dirt on front of paper	The front (printed) sided of the paper is dirty.	See Table 7-27. Causes for dirt on the front of the paper.
Vertical lines	Vertical lines are printed.	See Table 7-28. Causes for vertical lines.
White vertical lines	White vertical lines appear in the image.	See Table 7-29. Causes for white vertical lines.
Horizontal lines	Horizontal lines are printed.	See Table 7-30. Causes for horizontal lines.
White horizontal lines	White horizontal lines appear in the image.	See Table 7-31. Causes for white horizontal lines.
Missing color	One of the four toner colors is not printed.	See Table 7-32. Causes for a missing color.
Blank spots	The image has blank spots.	See Table 7-33. Causes for blank spots.

Table 7-18. Image defects (continued)

Image defect	Description	More information
Poor fusing	Toner is loose on the printed image.	See Table 7-34. Causes for poor fusing.
Distortion or blurring	The image appears distorted, or colors seem out of alignment.	See Table 7-35. Causes for distortion or blurring.
Smearing	The image is smeared or dirty.	See Table 7-36. Causes for smearing.
Misplaced image	The image is placed incorrectly on the page.	See Table 7-37. Causes for a misplaced image.

Light image

Table 7-19. Causes for light images

Causes for light images

Cause	Solution
Image density is not adjusted correctly.	Increase the density for each color.
Poor contact in the attaching bias contacts between the ETB and the high-voltage PCB.	Clean the contacts. Replace them if they are still dirty or are damaged.
Attaching roller is worn or damaged.	Replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Light color

Table 7-20. Causes for one color printing light

Causes for one color printing light

Cause	Solution
Poor contact in the transfer bias contacts between the ETB and the printer.	Clean the contacts for the affected color. If the contacts are still dirty after cleaning or if they are damaged, replace the contacts or the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).

Table 7-20. Causes for one color printing light (continued)

Causes for one color printing light

Cause	Solution
Developing disengaging unit is defective.	Replace the developing disengaging unit.
Transfer charging roller is worn or damaged.	Replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
Photosensitive drum is worn.	Replace the print cartridge for the affected color.
High-voltage PCB is defective.	Replace the high-voltage PCB.
Laser/scanner unit is defective.	Replace the laser/scanner for the affected color. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only).
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Dark image

Table 7-21. Causes for dark images

Causes for dark images

Cause	Solution
Image density is not adjusted correctly.	Decrease the density for each color.
Color registration detection unit is dirty.	Clean the lens on the color registration detection unit.
Color registration detection unit is defective.	Replace the color registration detection unit.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Dark color

Table 7-22. Causes for one color printing dark

Causes for one color printing dark

Cause	Solution
Poor contact in the drum ground, primary charging bias, and developing bias contacts of the high-voltage PCB and the print cartridge.	Clean the contacts on the cartridge for the affected color. If they are still dirty after cleaning, or if they are damaged, replace the cartridge.
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Completely blank image

Table 7-23. Causes for a completely blank image

Completely blank image

Cause	Solution
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

All black or solid color

Table 7-24. Causes for an all black or solid colored image

Causes for an all black or solid colored image

Cause	Solution
Poor contact in the drum ground, primary charging bias, and developing bias contacts of the high-voltage PCB and the print cartridge.	Clean the contacts on the cartridge for the affected color. If they are still dirty after cleaning, or if they are damaged, replace the cartridge.
Primary charging roller is defective.	Replace the print cartridge for the affected color.
High-voltage PCB is defective.	Replace the high-voltage PCB.

Table 7-24. Causes for an all black or solid colored image (continued)

Causes for an all black or solid colored image

Cause	Solution
Laser/scanner unit is defective.	Replace the laser/scanner unit for the affected color. **NOTE** Calibrate the printer after you replace the laser scanner. See Calibrate now (HP Color LaserJet 5500 models only).
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Dots in vertical lines

Table 7-25. Causes for vertical lines of white dots

Causes for vertical lines of white dots

Cause	Solution
Transfer charging roller is worn or damaged.	Replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Dirt on back of paper

Table 7-26. Causes for dirt on the back of the paper

Causes for dirt on the back of the paper

Cause	Solution
Rollers are dirty.	See Table 7-38. Repetitive defect spacing for information on identifying the roller(s) that might be dirty. Clean the indicated roller. If the roller is still dirty after cleaning, replace the appropriate roller, cartridge, or assembly.
Pickup roller is dirty.	Clean the roller. If the roller is still dirty after cleaning, replace the pickup roller assembly.

Table 7-26. Causes for dirt on the back of the paper (continued)

Causes for dirt on the back of the paper

Cause	Solution
Poor contact in the attaching bias contacts between the ETB and the high-voltage PCB.	Clean the contacts. Replace them if they are still dirty or are damaged.
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Dirt on front of paper

Table 7-27. Causes for dirt on the front of the paper

Causes for dirt on the front of the paper

Cause	Solution
Rollers are dirty.	See Table 7-38. Repetitive defect spacing for information on identifying the roller(s) that might be dirty. Clean the indicated roller. If the roller is still dirty after cleaning, replace the appropriate roller, cartridge, or assembly.
Pickup roller is dirty.	Clean the roller. If is still dirty after cleaning, replace the pickup roller assembly.
Poor contact in the attaching bias contacts between the ETB and the high-voltage PCB.	Clean the contacts. Replace them if they are still dirty or are damaged.
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Vertical lines

Table 7-28. Causes for vertical lines

Causes for vertical lines

Cause	Solution
Photosensitive drum has grooves going around the circumference.	Replace the cartridge for the color of the vertical lines.

Table 7-28. Causes for vertical lines (continued)

Causes for vertical lines

Cause	Solution
Fuser sleeve has grooves around the circumference.	Replace the fuser.

White vertical lines

Table 7-29. Causes for white vertical lines

Causes for white vertical lines

Cause	Solution
Developing cylinder has grooves going around the circumference.	Replace the print cartridge for the color in which the white lines appear.
Photosensitive drum has grooves going around the circumference.	Replace the print cartridge for the color in which the white lines appear.
Laser is blocked by a foreign substance.	Inspect the laser source for the affected color, and remove any debris that might be blocking it.
Mirror in the laser/scanner unit is dirty.	Replace the laser/scanner for the color in which the white lines appear. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only).
The fuser sleeve has vertical scars. (All colors are affected.)	Replace the fuser.

Horizontal lines

Table 7-30. Causes for horizontal lines

Causes for horizontal lines

Cause	Solution
Photosensitive drum has scars running from end to end.	Replace the print cartridge for the affected color.
The fuser sleeve has scars running from end to end.	Replace the fuser.

White horizontal lines

Table 7-31. Causes for white horizontal lines

Causes for white horizontal lines

Cause	Solution
Photosensitive drum has scars running from end to end.	Replace the print cartridge for the affected color.
ETB belt has horizontal scars.	Replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).

Missing color

Table 7-32. Causes for a missing color

Causes for a missing color

Cause	Solution
Poor contact in the developing bias contacts of the high-voltage PCB and the print cartridge.	Clean the contacts. If they are still dirty after cleaning, or if they are damaged, replace the print cartridge or the high-voltage contacts. Replace the high-voltage PCB.
Primary charging roller is defective.	Replace the print cartridge for the missing color.
Laser/scanner unit is defective.	Replace the laser/scanner for the missing color. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only).
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Blank spots

Table 7-33. Causes for blank spots

Causes for blank spots

Cause	Solution
High-voltage PCB is defective.	Replace the high-voltage PCB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Poor fusing

Table 7-34. Causes for poor fusing

Causes for poor fusing

Cause	Solution
Media is not within specifications. For example, media that is too thick causes poor fusing.	Use media that meets specifications. See “Supported media weights and sizes” on page 24.
Fuser is not within nip width specifications.	Replace the fuser.
Fuser sleeve is scarred or damaged.	Replace the fuser.
Pressure roller is scarred or damaged.	Replace the fuser.
Thermistor is deteriorated.	Replace the fuser.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Distortion or blurring

Table 7-35. Causes for distortion or blurring

Causes for distortion or blurring

Cause	Solution
Color plane registration is out of specification.	Calibrate the printer from the Print Quality menu. See Calibrate now (HP Color LaserJet 5500 models only).
ETB is defective.	If the ETB belt does not rotate smoothly, replace the ETB. Calibrate the printer after replacing the ETB. See Calibrate now (HP Color LaserJet 5500 models only).
ETB motor drive gear is worn or damaged.	Replace the ETB motor.
Drum motor drive gear is worn or damaged.	Replace the drum motor for the affected color.
Color registration detection unit is defective.	Replace the color registration detection unit.
Laser/scanner unit is defective.	Replace the laser/scanner for the affected color. Calibrate the printer after replacing the laser/scanner. See Calibrate now (HP Color LaserJet 5500 models only).
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Smearing

Table 7-36. Causes for smearing

Causes for smearing

Cause	Solution
Poor contact in the printer ground and cartridge ground contacts.	Clean each printer cartridge ground contact and the printer ground contact. If they are still dirty after cleaning, or if they are damaged, replace the cartridge, or replace the printer ground contact.
Fuser inlet guide is dirty or has debris.	Clean the fuser inlet guide.
Cartridge shutters are not opening.	Make sure the cartridge shutter bar is operating properly.

Misplaced image

Table 7-37. Causes for a misplaced image

Causes for a misplaced image

Cause	Solution
Paper is skewed.	See Table 7-17. Paper is skewed to resolve the reason for the skew.
Horizontal registration/transparency sensor is dirty.	Clean the sensor. See Cleaning the OHT sensor for instructions.
Duplex feed rollers are worn. (Applies to duplex printing only.)	Replace the ETB.
DC controller PCB is defective.	Replace the DC controller PCB. Calibrate the printer after replacing the DC controller. See Calibrate now (HP Color LaserJet 5500 models only).

Repetitive defects troubleshooting

Defects on printer rollers can cause image defects to appear at regular intervals on the page. Use the repetitive defects ruler on the next page to measure the distance between defects that recur on a page. Use Table 7-38. Repetitive defect spacing to determine which roller is causing the defect. To resolve the problem, try cleaning the roller first. If the roller is still dirty after cleaning or if it is damaged, replace the indicated part.

NOTE Letter codes before the roller names in Table 7-38. Repetitive defect spacing correspond to the letters at the top of the repetitive defects ruler. Not all rollers are shown in the ruler.

CAUTION Do not use solvents or oils to clean rollers. Instead, rub the roller with lint-free paper. If dirt is difficult to remove, rub the roller with lint-free paper dampened with rubbing alcohol.

Table 7-38. Repetitive defect spacing

Roller	Distance	Type of defect	Replacement part
A toner charging roller	14 mm (.55 inch)		
B developing cylinder	50 mm (1.97 inches)	defect on front of paper	print cartridge
C primary charging roller	38 mm (1.5 inches)	blank spots	print cartridge
D toner feed roller	43 mm (1.7 inches)		
E transfer/ media attaching roller (MAR)	38 mm (1.5 inches)	defect on front of paper	ETB
F fuser pressure roller	63 mm (2.5 inches)	defect on back of paper poor fusing	fuser
G transfer roller (center to center distance between cartridges)	82 mm (3.2 inches)		
H photosensitive drum	94 mm (3.7 inches)	defect on front of paper blank spots	cartridge
J fuser sleeve (fuser-heated roller)	107 mm (4.2 inches)	defect on front of paper poor fusing	fuser
fuser delivery roller	38 mm (1.5 inches)	defect on back of paper	fuser
output bin delivery roller	41 mm (1.6 inches)	defect on back of paper	fuser
registration roller	53 mm (2.1 inches)	defect on front of paper	paper pickup unit
sub registration roller	63 mm (2.5 inches)	blank spots	paper pickup unit
cassette feed roller	94 mm (3.7 inches)	defect on front of paper	paper pickup roller kit
cassette separation roller	94 mm (3.7 inches)	defect on back of paper	paper pickup roller kit
cassette pickup roller	see note below	defect on front of paper	paper pickup roller kit

Table 7-38. Repetitive defect spacing (continued)

Roller	Distance	Type of defect	Replacement part
MP tray pickup roller	see note below	defect on back of paper	MP tray pickup roller assembly

NOTE Defects on the cassette pickup roller or the multi-purpose tray pickup roller do not cause a repetitive defect. Defects on these rollers cause a defect to appear only on the leading edge of the image.

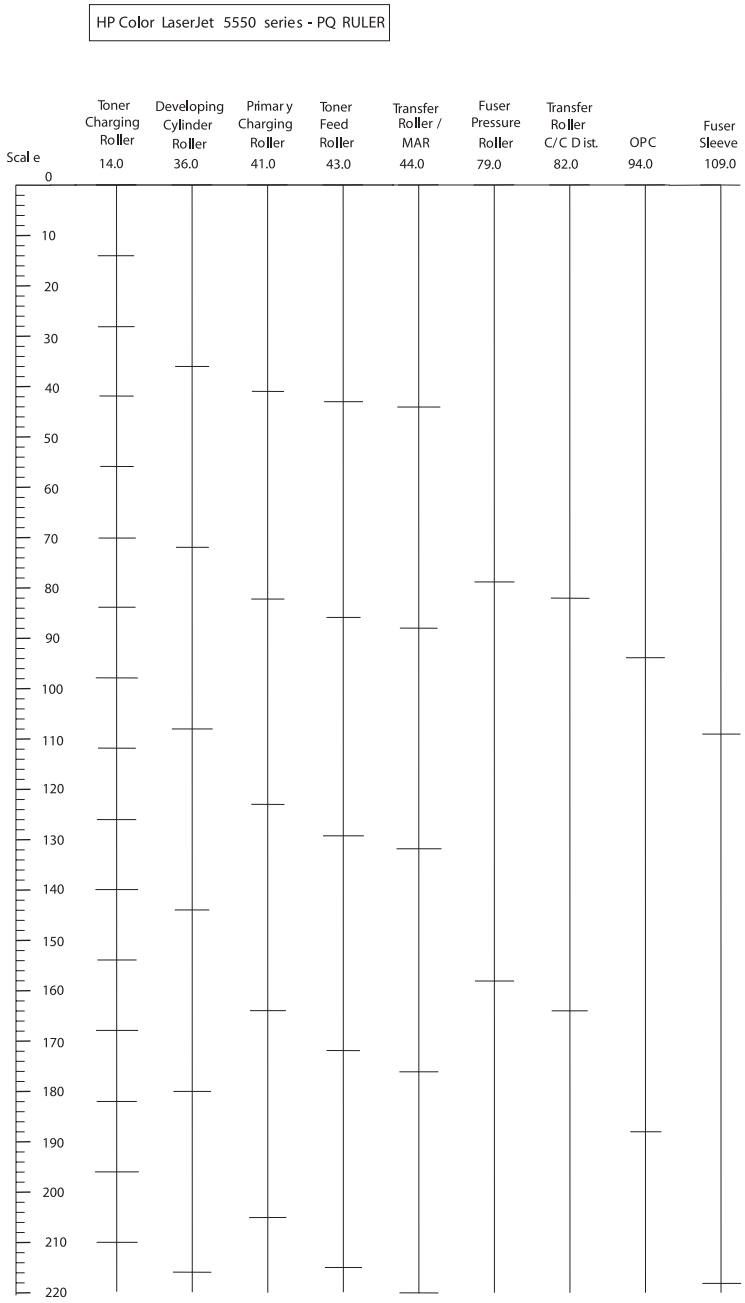


Figure 7-4. Repetitive defects ruler for the HP Color LaserJet 5550 printer

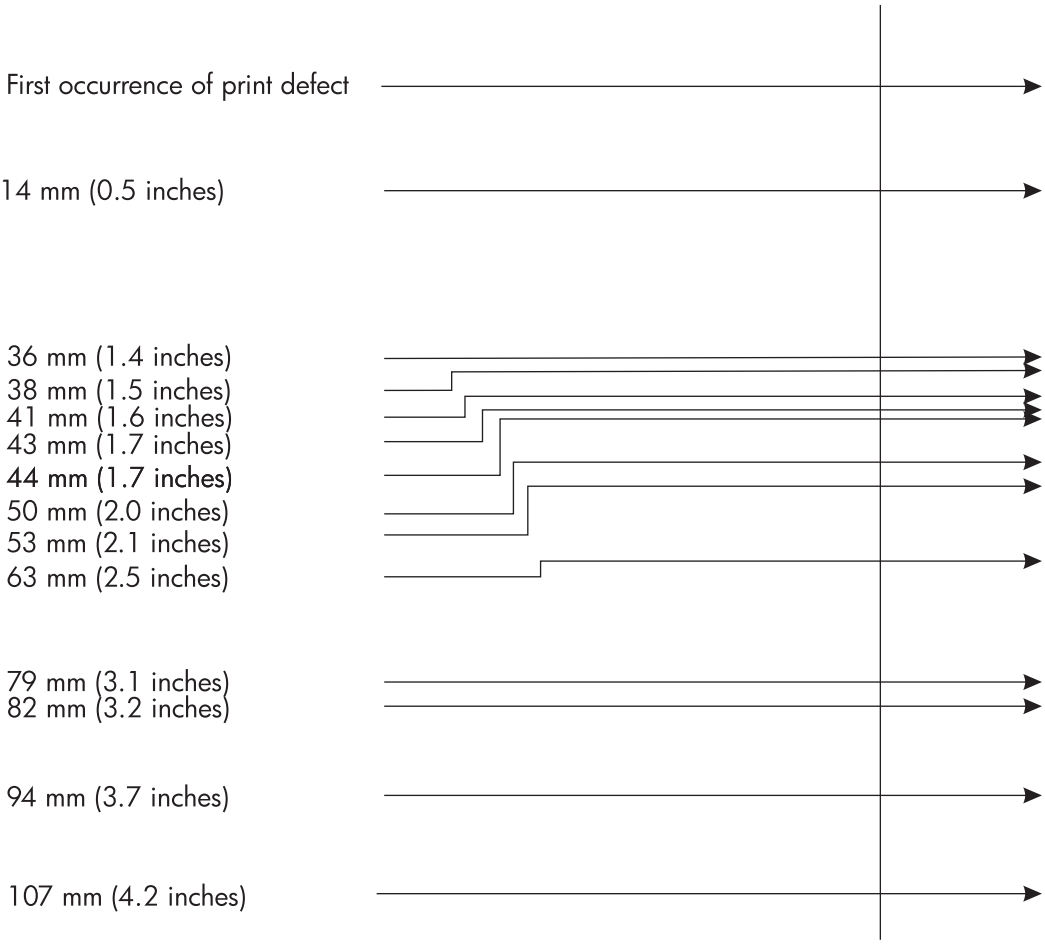


Figure 7-5. **Repetitive defects ruler for the HP Color LaserJet 5500 printer**

Interface troubleshooting

This section contains information to help the user troubleshoot interface problems.

Communications checks

NOTE

Communication problems are normally the customer's responsibility. Time spent attempting to resolve these problems might not be covered by the product's Hewlett-Packard warranty.

Refer the customer to the network administrator for assistance in troubleshooting network problems.

If the printer is not connected to an MS-DOS-based host, proceed to Table 7-39. Communications check.

Table 7-39. Communications check

Check	Action
Is your computer configured to the parameters described in the configuration instructions?	These parameters are required to communicate with the printer. Verify that the configuration of the computer's communications port matches these parameters. **NOTE** If these parameters are not set properly, an error might display on the control panel.

EIO troubleshooting

If the printer contains an optional HP Jetdirect print server, and you cannot communicate with the printer over the network, verify the operation of the print server. Print a configuration page. If the Jetdirect card does not appear under "Installed personalities and options" on the configuration page (indicated by the arrow in Figure 7-8. HP Color LaserJet 5500 printer configuration page), see the troubleshooting section of the *HP Jetdirect Print Server Software Installation Guide*.

If the host system and printer are still not communicating, replace the formatter PCB and the EIO card and reconfigure the printer. If the problem persists, a protocol analyzer might be needed to find the source of the problem.

CAUTION

HP LaserJetprinters are not designed to work with mechanical switch-box products without proper surge protection. These devices generate high transient voltages that cause permanent damage to the formatter PCB. This circumstance is not covered by the Hewlett-Packard warranty.

AUTOEXEC.BAT standard configurations

Use the following standard command.

Parallel DOS commands

Ensure that the AUTOEXEC.BAT file contains the following statements for parallel interface communications:

```
MODE LPT1: ,,P
```

For MS-DOS version 4.0 and above:

```
MODE LPT1: ,,B
```

NOTE This example assumes that you are using parallel printer port LPT1. If you are using LPT2 or LPT3, replace LPT1 in the example with the appropriate printer port.

Printer Job Language (PJL) commands

See the *HP Printer Job Language Technical Reference Manual* for a complete description of PJL commands. This manual is available with the *HP PCL/PJL Reference Set* on CD-ROM, part number 5021-0337.

@PJL [Enter]

This command enables the specified printer language. If the printer does not receive this command it enables the default language. This ensures the correct operation applications that do not support PJL. The command syntax is:

```
@PJL [Enter] LANGUAGE = {PCL/PostScript} [<CR>] <LF>
```

UEL (universal exit language)

This command (also referred to as the universal exit language command) terminates the current printer language and returns control to PJL. It performs the following actions:

- Prints all data received before this command.
- Performs a reset: <esc>E in PCL, <cntrl>D in PostScript.
- Turns control over to PJL.

This command is also a valid HP-GL/2 terminator.

The UEL command must be immediately followed by the “@PJL” command prefix. Characters or control codes other than @PJL (such as <CR> or <LF>), enable the default language and process the print job in that language. All jobs must begin and end with the UEL command. Besides entering PJL, the UEL command has the same effect as the <esc>E command. However, the <esc>E command should always be included to ensure backward compatibility.

@PJL COMMENT

This command designates the current line as a comment, which is ignored. The syntax is:

```
@PJL COMMENT <words> [<CR>] <LF>
```

@PJL INFO CONFIG

This command solicits a response to describe the installed options and allows the printer to configure the installed options automatically as the applications require.

@PJL INFO ID

This command identifies the printer type to the host for reference when selecting printer drivers for automatic installation. The command syntax is:

```
@PJL INFO ID <CR> <LF>
```

@PJL INFO USTATUS

This command queries the state of unsolicited JOB status. PAGE and TIMED status are not supported. The syntax is:

```
@PJL INFO USTATUS <CR> <LF>
```

@PJL INFO PAGECOUNT

This command returns the number of pages printed by the engine.

@PJL JOB

This command informs the printer of the start of a PJL job and synchronizes the job status information. The printer counts print jobs, including nested jobs, incrementing the job counter for the @PJL JOB command and decrementing it for @PJL EOJ.

The printer accepts the NAME= parameter and returns the name string in the unsolicited JOB start status message (if unsolicited job status is enabled). The printer transmits the unsolicited JOB status message to every I/O channel that has enabled this function. This message's format is:

```
@PJL USTATUS JOB <CR><LF>

START<CR><LF>

[NAME=<job name><CR><LF>]

<FF>
```

The printer resets the nested job counter whenever it switches the source to a different I/O channel. This prevents a corrupt job on one channel from disrupting the activities on another channel.

@PJL EOJ

This command identifies the end of a print job and is a hint for the I/O switching algorithm. The printer counts nested jobs and recognizes job boundaries when the counter decrements to zero. The printer ignores isolated EOJ commands. Each EOJ must be preceded by a JOB command.

@PJL ECHO

This printer supports the ECHO command which transmits its parameters over the I/O channel to the host that issued the command.

@PJL USTATUS JOB=ON/OFF

This command enables or disables the JOB status for the I/O channel that delivers the command.

@PJL USTATUSOFF

This command disables the unsolicited JOB status for the I/O channel that delivered the command. For this printer, it duplicates the function of `@PJL USTATUS JOB=OFF, AND @PJL USTATUS DEVICE=OFF`.

NOTE All commands not supported by this printer's PJL command set are returned with the message `@PJL XXXX<CR><LF>?<CR><LF>`.

Control panel troubleshooting

When you press ✔ to enter the menus, the high-level menus are displayed in the following order:

- **RETRIEVE JOB** (this menu displays only if a hard disk is installed)
- **MENUS**
- **PAPER HANDLING**
- **CONFIGURE DEVICE**
- **DIAGNOSTICS**
- **SERVICE**

A menu map shows how individual items are configured within each of these menus. Figure 7-7. HP Color LaserJet 5550 printer menu map shows a sample of one page of the menu map. The menu map prints on six pages. The last page gives instructions on how to use the control panel buttons.

Printing a menu map

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to enter the **MENUS**.
2. Press ▼ to highlight **MENUS**.
3. Press ✔ to select **MENUS**.
4. Press ▼ to highlight **PRINT MENU MAP**.
5. Press ✔ to select **PRINT MENU MAP**.

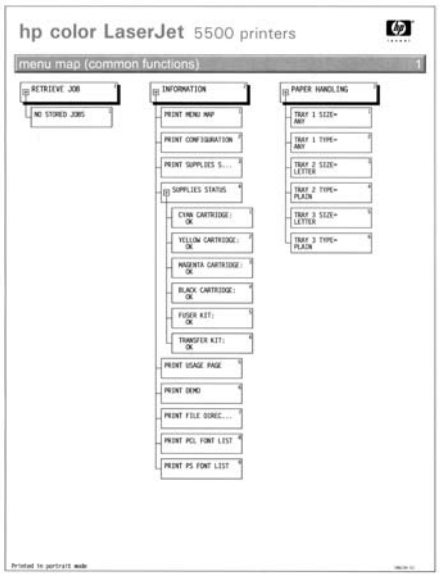


Figure 7-6. **HP Color LaserJet 5500 printer menu map**

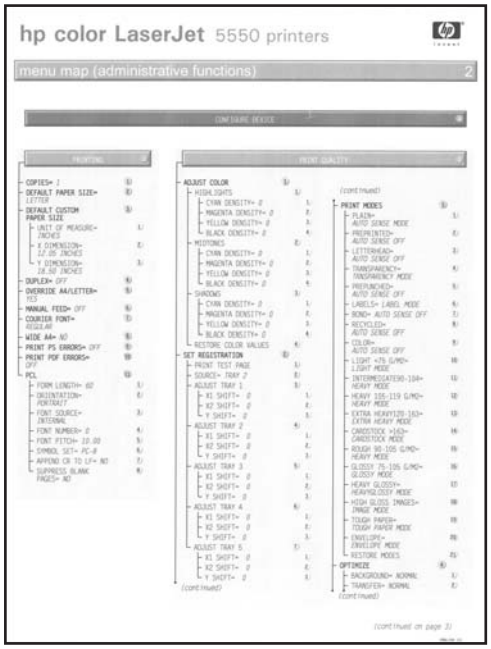


Figure 7-7. **HP Color LaserJet 5550 printer menu map**

Information menu

Use the information menu to access and print specific printer information.

Table 7-40. Information menu descriptions

Menu item	Description
PRINT MENU MAP	Prints the control panel menu map, which shows the layout and current settings of the control panel menu items.
PRINT CONFIGURATION	The configuration page shows the current printer configuration. If an HP Jetdirect print server is installed, an HP Jetdirect configuration page will also print. For more information, see Printer configuration page.
PRINT SUPPLIES STATUS PAGE	Prints the estimated remaining life for the supplies; reports statistics on total number of pages and jobs processed, print cartridge manufacture date, serial number, page counts, and maintenance information.
SUPPLIES STATUS	Displays the supplies status in a scrollable list.
PRINT USAGE PAGE	Prints a count of all media sizes that have passed through the printer; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
PRINT DEMO	Prints a demonstration page.

Table 7-40. Information menu descriptions (continued)

Menu item	Description
PRINT RGB SAMPLES	Prints color samples for different RGB values. The samples act as a guide for color matching on the HP Color LaserJet 5550 models only.
PRINT CMYK SAMPLES	Prints color samples for different CMYK values. The samples act as a guide for color matching on the HP Color LaserJet 5550 models only.
PRINT FILE DIRECTORY	Prints the name and directory of files stored in the printer on an optional hard drive.
PRINT PCL FONT LIST	Prints the available PCL fonts.
PRINT PS FONT LIST	Prints the available PS (emulated PostScript) fonts.

Paper handling menu

The paper handling menu allows you to configure input trays by size and type. It is important to correctly configure the trays with this menu before you print for the first time.

NOTE

If you have used previous HP Color LaserJet printers, you might be accustomed to configuring Tray 1 to first mode or cassette mode. To mimic the settings for first mode, configure Tray 1 for size = **ANY SIZE** and type = **ANY TYPE**. To mimic the settings for cassette mode, set either the size or type for Tray 1 to a setting other than **ANY**.

Menu item	Value	Description
TRAY 1 SIZE	A list of available sizes appears.	Allows you to configure the media size for Tray 1. The default is **ANY SIZE**.
TRAY 1 TYPE	A list of available types appears.	Allows you to configure the media type for Tray 1. The default is **ANY TYPE**. S
TRAY <N> SIZE N = 2, 3, 4, or 5	A list of available sizes appears.	Allows you to configure the media size for Trays 2, 3, 4, and 5 (HP Color LaserJet 5550). The default setting is the size detected by the guides in the tray. To use a custom size, move the switch in the tray to custom.
TRAY <N> TYPE N = 2, 3, 4, or 5	A list of available types appears.	Allows you to configure the media type for Trays 2, 3, 4, and 5 (HP Color LaserJet 5550). The default is **PLAIN**.

Configure device menu

The Configure device menu has several submenus. These submenus allow you to change the printer's default printing settings, adjust the print quality, change the system's configuration and I/O options, and reset the printer to its default settings.

Printing menu

These settings affect only jobs without identified properties. Most jobs identify all of the properties and override the values set from this menu. This menu can also be used to set default paper size and type.

Table 7-41. Printing menu values and descriptions

Menu item	Values	Description
COPIES	**1 - 32000**	Allows you to set the default number of copies.
DEFAULT PAPER SIZE	A list of available sizes appears.	Allows you to see the default paper size. This setting applies only to print jobs that do not have a paper size specified in the program or the printer driver.
DEFAULT CUSTOM PAPER SIZE	**UNIT OF MEASURE** **X DIMENSION** **Y DIMENSION**	Allows you to set the default size for any job without dimensions. This menu appears only if the custom-standard switch in the selected tray is set to custom.
DUPLEX	**OFF** **ON**	Allows you to enable or disable the duplex function on models with duplexing capabilities. **OFF**: prints on one side (simplex) of a sheet of paper. **ON** prints on both sides (duplex) of a sheet of paper. Default is **OFF**.
DUPLEX BINDING	**LONG EDGE** **SHORT EDGE**	This item appears only if the printer has a duplex unit and if **DUPLEX** is set to **ON**. It allows you to choose the edge of the paper to use for binding duplex jobs.
OVERRIDE A4/LETTER	**NO** **YES**	Allows you to set the printer to print an A4 job on letter-size paper when no A4 paper is loaded, a letter-size job when no A4-size paper is loaded, an A3 job on 11 x 17-size paper when no A3 paper is loaded, and a 11 x 17-size job on A3 paper when no 11 x 17-size paper is loaded.

Table 7-41. Printing menu values and descriptions (continued)

Menu item	Values	Description
MANUAL FEED	**ON** **OFF**	Allows you to manually feed media. Feeds the paper manually from tray 1, rather than automatically from a tray. If MANUAL FEED=ON and tray 1 is empty, the printer goes offline when it receives a print job. MANUALLY FEED= [PAPER SIZE] appears on the printer control panel display. Default is OFF.
COURIER FONT	**REGULAR** **DARK**	Allows you to select a version of the Courier font. **REGULAR**: the internal Courier font available on the HP LaserJet 4 series printer. **DARK**: The internal Courier font that is available on the HP LaserJet III series printer. Default is **REGULAR**.
WIDE A4	**NO** **YES**	Allows you to change the printable area of A4 paper so that eighty 10-pitch characters may be printed on a single line. **NO**: Up to 78 10-pitch characters can be printed on one line. **YES**: Up to 80 10-pitch characters can be printed on one line. Default is **NO**.
PRINT PS ERRORS	**OFF** **ON**	Allows you to select to print PS error pages. **OFF**: PS error page never prints. **ON**: PS error page prints when a PS error occurs. Default is **OFF**.
PRINT PDF ERRORS	**OFF** **ON**	HP Color LaserJet 5550: Allows you to select to print PDF error pages. The default is **OFF**.

Table 7-41. Printing menu values and descriptions (continued)

Menu item	Values	Description
PCL	**FORM LENGTH** **ORIENTATION** **FONT SOURCE** **FONT NUMBER** **FONT PITCH** **FONT POINT SIZE** **SYMBOL SET**	Submenu that allows access to PCL menu items. **FORM LENGTH: Sets vertical spacing from 5 to 128 lines for default paper size.** **ORIENTATION: Allows you to change default page orientation from portrait to landscape.** **FONT SOURCE: Allows you to select the font source as *Internal, CARD SLOT1 or 2, Internal disk, or EIO disk.** **FONT NUMBER: The printer assigns a number to each font and lists the numbers on the PCL Font List. The range is 0 to 999.** **FONT PITCH: Selects the font pitch. This item might not appear, depending on the font selected. The range is 0.44 to 99.99.** **FONT POINT SIZE: Selects the font point size. This appears only if a font with a scalable point size is selected as the default font. The range is 4.00 to 999.75.** **SYMBOL SET: Selects any one of several available symbol sets at the printer control panel. A symbol set is a unique grouping of all the characters in a font. PC-8 or PC-850 is recommended for line-draw characters.**

Table 7-41. Printing menu values and descriptions (continued)

Menu item	Values	Description
PCL (continued)	**APPEND CR TO LF** **SUPPRESS BLANK PAGES**	**APPEND CR TO LF: Select YES to append a carriage return to each line feed encountered in backward-compatible PCL jobs (pure text, no job control). Some environments, such as UNIX, indicate a new line using only the line feed control code. This option allows you to append the required carriage return to each line feed.** **SUPPRESS BLANK PAGES: When generating your own PCL, extra form feeds are included that would cause a blank page(s) to be printed. Select YES for form feeds to be ignored if the page is blank.**

Print quality menu

The Print quality menu allows you to adjust all aspects of print quality, including calibration, registration, and color halftone settings.

Table 7-42. Print quality submenu

Menu item	Values	Description
ADJUST COLOR	**CYAN DENSITY** **MAGENTA DENSITY** **YELLOW DENSITY** **BLACK DENSITY** **RESTORE COLOR VALUES**	Allows you to modify the halftone settings for each color.

Table 7-42. Print quality submenu (continued)

Menu item	Values	Description
SET REGISTRATION	**PRINT TEST PAGE** **SOURCE** **ADJUST TRAY 1** **ADJUST TRAY 2** **ADJUST TRAY 3** **ADJUST TRAY 4** **ADJUST TRAY 5**	Shifts the margin alignment to center the image on the page from top to bottom, and left to right. You can also align the image that is printed on the front with the image that is printed on the back. **PRINT TEST PAGE**: Prints a test page that shows the current registration settings. **SOURCE**: Allows you to select the tray for which you want to print the test page. If installed, optional trays appear as selections, where <N> is the number of the tray. **ADJUST TRAY <N>**: Sets the registration for the specified tray, where <N> is the number of the tray. A selection appears for each tray that is installed and registration must be set for each tray. **X1 SHIFT**: Registration of the image on the paper from side to side, as the paper lies in the tray. For duplexing, this side is the second side (back) of the page. **X2 SHIFT**: Registration of the image on the paper side to side, as the paper lies in the tray for the first side (front) of a duplexed page. This item appears only if an optional duplexer is installed and enabled. Set the **X1 SHIFT** first. **Y SHIFT**: Registration of the image on the paper from top to bottom as the paper lies in the tray.
PRINT MODES	A list of available modes appears.	Allows you to associate each media type with a specific print mode. Change the fuser mode only if you are experiencing problems printing on certain media types. After you select a type of media, you can select a fuser mode that is available for that media type.

Table 7-42. Print quality submenu (continued)

Menu item	Values	Description
OPTIMIZE	**REDUCE** (HP Color LaserJet 5550 models only) **REDUCE BACKGROUND** (HP Color LaserJet 5500 models only) **BACKGROUND** (HP Color LaserJet 5550 models only) **TRANSFER** **TRANSPARENCY** (HP Color LaserJet 5550 models only) **FUSER WARM UP** (HP Color LaserJet 5550 models only) **MEDIA TYPE** (HP Color LaserJet 5550 models only) **TRAY 1** (HP Color LaserJet 5550 models only) **RESTORE OPTIMIZE** **94 mm** (HP Color LaserJet 5550 models only)	Allows you to optimize certain parameters for all jobs rather than optimizing by media type.
CALIBRATE NOW (HP Color LaserJet 5500 models only)		Executes all printer calibrations: DMAX, DHALF, color plane registration, and drum phase adjustment
QUICK CALIBRATE NOW (HP Color LaserJet 5550 models only)		Use this item to perform a partial printer calibration (D-Max and D-Half) used for color tone correction.
FULL CALIBRATE NOW (HP Color LaserJet 5550 models only)		Use this item to perform a full printer calibration, which includes D-Max, D-Half, drum phase calibration, and color plane registration.

System setup menu

The System setup menu allows you to make changes to general printer configuration default settings such as PowerSave Time, printer personality (language), and jam recovery.

Table 7-43. System setup submenu

Menu item	Values	Description
JOB STORAGE LIMIT	1-100	Sets the limit for the maximum number of jobs stored on the hard disk at the printer.

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
JOB HELD TIMEOUT	**OFF** **1 HOUR** **4 HOURS** **1 DAY** **1 WEEK**	Sets the period of time that the system keeps files in job storage before deleting them from the queue.
SHOW ADDRESS	**AUTO** **OFF**	This item determines whether the printer's IP address is shown on the display with **Ready**. If more than one EIO card is installed, the IP address of the card in the first slot is shown. The default is **OFF**.

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
COLOR/MONO MIX	**AUTO** **MOSTLY COLOR PAGES** **MOSTLY BLACK PAGES**	This menu item establishes how the printer switches from color to monochrome (black and white) mode for maximum performance and print cartridge life. **AUTO**: Will determine the mode the engine will go into based on the first page of the print job. If the first page is monochrome, the engine will go into mono mode until a color page is detected. It will then continue in color mode until the end of the job. If the first page is in color the engine will go into color mode for the duration of the print job. **MOSTLY COLOR PAGES**: Select if nearly all of your print jobs are color with high page coverage. This will cause the engine to always run in color mode, even if the whole job is in monochrome. **MOSTLY BLACK PAGES**: Select if you print mostly monochrome print jobs or a combination of color and monochrome print jobs. This will cause the engine to switch back and forth between color and monochrome mode. If the first page is monochrome, the engine will go into mono mode until a color page is detected. It will then go into color mode. If 2 consecutive monochrome pages are detected, the engine will switch back to monochrome mode again. If the first page is color, the engine will go into color mode until 2 consecutive monochrome pages are detected, at which point, it will switch back to monochrome mode again.

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
TRAY BEHAVIOR	**USE REQUESTED TRAY** **MANUAL FEED PROMPT** **PS DEFER MEDIA**	Allows you to specify settings for the tray selection behavior. (This setting allows you to configure the trays to behave like trays in some previous HP printers.) **USE REQUESTED TRAY**: Determines whether the printer tries to pull paper from a different tray than the one that you selected in the printer driver. • **EXCLUSIVELY**: Sets the printer to pull paper only from the tray that you selected and not pull from another tray, even if the tray that you selected is empty. • **FIRST**: Sets the printer to pull paper only from the tray that you selected first, but allows the printer to pull from another tray automatically if the tray that you selected is empty. **MANUAL FEED PROMPT**: Determines when the printer shows a prompt regarding pulling from tray 1 if the print job does not match the tray size that is loaded in any other tray. • **ALWAYS**: Select this option if you always want to be prompted before the printer pulls from tray 1. • **UNLESS LOADED**: Prompts you only if tray 1 is empty. **PS DEFER MEDIA**: Controls whether the PostScript (PS) or HP paper handling model is used to print jobs. • **ENABLED**: Causes PS to defer to the HP paper handling model. • **DISABLED**: Uses the PS paper handling model.

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
POWERSAVE TIME	Settings depend on the printer model. **1 MINUTE** 15 MINUTES **30 MINUTES** **60 MINUTES** **90 MINUTES** **2 HOURS** **4 HOURS**	Reduces power consumption when the printer has been inactive for the period of time specified by this item. Reduces wear on electronic components in the printer. The printer automatically comes out of **POWERSAVE** mode when a job is sent to the printer. The default is **30 MINUTES**.
PERSONALITY	**AUTO** **PCL** **PS** **PDF (HP Color LaserJet 5550 models only)** **MIME (HP Color LaserJet 5550 models only)**	Sets the default personality to automatic switching, PCL, or PostScript emulation.
CLEARABLE WARNINGS	**ON** **JOB**	Sets the amount of time that a clearable warning appears on the printer control panel display. **ON**: The clearable warning message appears until you press ✔ (Select). **JOB**: The clearable warning message appears until the end of the print job that generaged the message.
AUTO CONTINUE	**ON** **OFF**	Determines how the printer reacts to errors. If the printer is on a network, turn **AUTO CONTINUE** to **ON**. **ON**: If an error occurs that prevents printing, the message appears on the printer control. panel display and the printer goes offline for 10 seconds before returning online. **OFF**: If an error occurs that prevents printing, the message remains on the printer control panel display and the printer remains offline until you press ✔ (Select).

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
SUPPLIES LOW	**CONTINUE** **STOP**	Determines how the printer behaves if the print cartridge is low. Print quality is not guaranteed if you print after receiving this message. **CONTINUE**: The printer continues to print, and the message appears until you replace the print cartridge. **STOP**: The printer pauses printing until you replace the print cartridge or press ✔ (Select) each time you turn the printer on. The message appears until you replace the print cartridge.
COLOR SUPPLY OUT (HP Color LaserJet 5550 models only)	**AUTO CONTINUE BLACK** **STOP**	Sets **COLOR SUPPLY OUT** printer behavior. When a color supply is empty and the printer is set to **AUTO CONTINUE BLACK**, the printer will continue printing using the black toner only for a maximum of 500 pages.
JOB STORAGE LIMIT	1-100	Sets the limit for the maximum number of jobs stored on the hard disk at the printer.
JAM RECOVERY	**AUTO** **ON** **OFF**	Determines how the printer behaves if a jam occurs. **AUTO**: The printer automatically selects the best mode for the printer jam recovery (usually **ON**). **ON**: The printer automatically reprints pages after the jam is cleared. **OFF**: The printer does not reprint pages following the jam. Printing performance might be increased with this setting.
LANGUAGE	A list of available languages appears.	Sets the default language.

Table 7-43. System setup submenu (continued)

Menu item	Values	Description
RAM DISK	**AUTO** **OFF**	Determines how the **RAM DISK** is configured. This item only appears if an optional hard disk accessory is installed. **AUTO**: Allow the printer to determine the optimal **RAM DISK** size based on the amount of available memory. **OFF**: The **RAM DISK** is not available. **NOTE** If you change the setting from **OFF** to **AUTO**, the printer automatically reinitializes when it becomes idle.

I/O menu

The I/O menu allows you to configure the printer's I/O options.

Table 7-44. I/O submenu

Menu item	Values	Description
I/O TIMEOUT	5 - 300	Allows you to select the I/O timeout in seconds.
PARALLEL INPUT	**HIGH SPEED** **ADVANCED FUNCTIONS**	Allows you to select the speed at which the parallel port communicates with the host, and to enable or disable the bi-directional parallel communication. **HIGH SPEED**: Select **YES** to enable the printer to accept the faster parallel communications that are used for connections with newer computers. **ADVANCED FUNCTIONS**: Turn the bi-directional communications **ON** or **OFF**. The default is set for bi-directional parallel port (IEEE-1284). This function allows the printer to send status read back messages to the computer. (Turning the parallel advanced functions on might slow language switching.)

Table 7-44. I/O submenu (continued)

Menu item	Values	Description
EIO X (Where X=1, 2, or 3.)	Possible values are: **TCP/IP** **IPX/SPX** **APPLETALK** **DLC/LLC** **SECURE WEB (HP Color LaserJet 5550 models only)** **RESET SECURITY (HP Color LaserJet 5550 models only)** **LINK SPEED (HP Color LaserJet 5550 models only)**	Allows you to configure EIO devices installed in slot 1, 2, or 3.

Resets menu

The Resets menu allows you to reset factory settings, disable and enable PowerSave, and update the printer after new supplies are installed.

Table 7-45. Resets submenu

Menu item	Values	Description
RESTORE FACTORY SETTINGS	None.	Allows you to clear the page buffer, remove all perishable personality data, reset the printing environment, and return all default settings to factory defaults.
POWERSAVE	**ON** **OFF**	Allows you to enable and disable PowerSave.
RESET SUPPLIES	**NEW TRANSFER KIT** **NEW FUSER KIT**	Allows you to inform the printer that a new transfer kit or new fuser kit has been installed.

Diagnostics menu

The diagnostics menu allows you to run tests that can help you identify and solve problems with the printer.

Table 7-46. Diagnostics menu

Menu item	Description
PRINT EVENT LOG	Prints an event log that shows the last 50 entries in the printer event log, starting with the most recent.

Table 7-46. Diagnostics menu (continued)

Menu item	Description
SHOW EVENT LOG	Shows the last 50 events on the control panel display, starting with the most recent.
PQ TROUBLESHOOTING	Prints a series of print-quality assessment pages that help troubleshoot any print-quality problems.
DISABLE CARTRIDGE CHECK	Use this item to remove a print cartridge to help determine which cartridge is the source of the problem.
Paper Path SENSOR TEST (HP Color LaserJet 5550 models only)	Use this item to test each of the printer sensors to determine if they are working correctly and display the status of each sensor.
PAPER PATH TEST	Use this item to test the paper-handling features of the printer, such as the configuration of the trays. **PAPER PATH TEST** generages a test page that is useful for testing the paper-handling features of the printer. **PRINT TEST PAGE**: Press ✔ (Select) to start the paper path test using the source (tray), destination (output bin), duplex, and the number of copies setting that you set in the other items on the **PAPER PATH TEST** menu. Set the other items before selecting **PRINT TEST PAGE**. **SOURCE**: Select the tray that uses the paper path that you want to test. You can select any tray that is installed. Select **ALL TRAYS** to test all tray paper paths. Paper must be loaded in the selected tray. **DUPLEX**: Determines whether the paper goes through the duplexer during the paper path test. This item is available only if the duplexer is installed. **COPIES**: Set how many sheets of paper are used from each tray during the paper path test.
SENSOR TEST (HP Color LaserJet 5500 models only)	Use this item to test the paper-path sensors and switches for correct operation.
MANUAL SENSOR TEST (HP Color LaserJet 5550 models only)	Use this item to manually test the sensors and switches for correct operation.
COMPONENT TEST	Activates individual parts independently to isolate noise, leaking, and other hardware issues.
PRINT/STOP TEST	Isolates print-quality faults more accurately by stopping the printer in mid print cycle. Stopping the printer in mid-cycle allows you to see where the image begins to degrade.
COLOR BAND TEST (HP Color LaserJet 5550 models only)	Use this item to print a color band test page that is used to identify arching in the high-voltage power supply.

Service menu

The Service menu is PIN protected for added security. Only authorized service people have access to the service menu. When you select **SERVICE** from the list of menus, you are prompted to enter your 8-digit PIN number. The PIN for the HP Color LaserJet 5500 printer is 04555002, and the PIN for the HP Color LaserJet 5550 printer is 04555004.

1. Press ▲ or ▼ until the first digit of the PIN is displayed.
2. Press ✔ to save the digit. The display will replace the digit with an asterisk.
3. Repeat steps 1 and 2 until all eight digits are entered.
4. Press ⮌ at any time to move to the previous digit.

Use the Service menu to reset counts, clear the event log, enter the serial number, enter the date the printer was first used, and reset the default paper size.

Table 7-47. Service menu

Menu item	Values	Description
Clearing event log		Allows you to clear the printer's internal event log
TOTAL PAGE COUNT	Range: 0 - 9999999	Allows you to reset the page count after replacing the formatter. The page count should reflect the number of pages printed on the print engine rather than the formatter.
TRANSFER KIT COUNT	Range: 0 - 9999999 (120,000 is the maximum number of pages the transfer unit can print)	Allows you to reset the page count of the current transfer unit if the value is lost. This item automatically resets to zero when the transfer unit is replaced and the user selects the choice to reset the transfer count.
FUSER KIT COUNT	Range: 0 - 9999999 (150,000 is the maximum number of pages the fuser can print)	Allows you to reset the page count of the current fuser if the value is lost. This item automatically resets to zero when the fuser is replaced and the user selects the choice to reset the fuser count.
SERIAL NUMBER	**XXXXXXXXXX**	Allows you to update the serial number if you replace the formatter.
SERVICE ID	**YYDD**	If you replace the formatter, this item allows you to set the date to the date the printer was first used, rather than the date the new formatter was installed. See Service ID for information on the date format.

Table 7-47. Service menu (continued)

Menu item	Values	Description
COLD RESET PAPER	**LETTER** **A4**	If the customer uses default paper size of A4 (used in Europe), this item allows you to reset the default if you replace the formatter.

Tools for troubleshooting

This section contains information for using the embedded Web server, HP Toolbox, and the Printer Status and Alerts software to help resolve printer problems.

Embedded Web server

When the printer is directly connected to a computer, the embedded Web server is supported for Windows 95 and later. In order to use the embedded Web server with a direct connection, you must choose the Custom installation option when you install the printer driver. Select the option to load Printer Status and Alerts. The proxy server is installed as part of the Printer Status and Alerts software.

When the printer is connected to the network, the embedded Web server is automatically available. You may access the embedded Web server from Windows 95 and later.

The embedded Web server allows you to view printer and network status and to manage printing functions from your computer instead of from the printer control panel. Below are examples of what you can do using the embedded Web server:

- View printer control status information.
- Set the type of paper loaded in each tray.
- Determine the remaining life on all supplies and order new ones.
- View and change tray configurations.
- View and change the printer control panel menu configuration.
- View and print internal pages.
- Receive notification of printer and supplies events.
- View and change network configuration.

To use the embedded Web server, you must have Microsoft Internet Explorer 4 and later or Netscape Navigator 4 and later. The embedded Web server works when the printer is connected to an IP-based network. The embedded Web server does not support IPX-based printer connections. You do not have to have Internet access to open and use the embedded Web server.

To access the embedded Web server

In a supported Web browser on your computer, type the IP address for the printer. (To find the IP address, print a configuration page.)

NOTE Once you open the URL, you can bookmark it so that you can return to it quickly in the future.

1. The embedded Web server has three tabs that contain settings and information about the printer: the **Information** tab, the **Settings** tab, and the **Network** tab. Click the tab that you want to view.
2. See the following sections for more information about each tab.

Information tab

The Information pages group consists of the following pages:

- **Device Status**. Displays the printer status and shows the life remaining of HP supplies, with 0 percent representing that a supply is empty. The page also shows the type and size of print media set for each tray. To change the default settings, click **Change Settings**.
- **Configuration page**. Shows the information found on the printer Configuration page.
- **Supplies Status**. Shows the life remaining of HP supplies, with 0 percent representing that a supply is empty. This page also provides supplies part numbers. To order new supplies, click **Order Supplies** in the **Other Links** area on the left side of the window. To visit any website, you must have Internet access.
- **Event log**. Shows a list of all printer events and errors.
- **Usage page**. Shows a summary of the number of pages the printer has printed, grouped by size and type.
- **Device Information**. Shows the printer network name, address, and model information. To change these entries, click **Device Information** on the **Settings** tab.

Settings tab

This tab allows you to configure the printer from your computer. The **Settings** tab can be password protected. If this printer is networked, always consult with the printer administrator before changing settings on this tab.

The **Settings** tab contains the following pages:

- **Configure Device**. Allows you to configure all printer settings from this page. This page contains the traditional menus found on printers using a control panel display. These menus include **Information**, **Paper Handling**, **Configure Device**, and **Diagnostics**.
- **Alerts**. Network only. Allows you to set up to receive e-mail alerts for various printer and supplies events.
- **E-mail**. Network only. Used in conjunction with the Alerts page to set up incoming and outgoing e-mail, as well as to set e-mail alerts.
- **Security**. Allows you to set a password that must be entered to gain access to the **Settings** and **Networking** tabs. Enable and disable certain features of the EWS.
- **Other Links**. Allows you to add or customize a link to another website. This link is displayed in the **Other Links** area on all embedded Web server pages. These permanent links always appear in the **Other Links** area: **HP Instant Support™**, **Order Supplies**, and **Product Support**.
- **Device Information**. Allows you to name the printer and assign an asset number to it. Enter the name and e-mail address for the primary contact who will receive information about the printer.
- **Language**. Allows you to determine the language in which to display the embedded Web server information.

Networking tab

This tab allows the network administrator to control network-related settings for the printer when it is connected to an IP-based network. This tab will not appear if the printer is directly connected to a computer, or if the printer is connected to a network using anything other than an HP Jetdirect print server card.

Other links

This section contains links that connect you to the Internet. You must have Internet access in order to use any of these links. If you use a dial-up connection and did not connect when you first opened the embedded Web server, you must connect before you can visit these websites. Connecting might require that you close the embedded Web server and reopen it.

- **HP Instant Support™** connects you to the HP website to help you find solutions. This service analyzes your printer error log and configuration information to provide diagnostic and support information specific to your printer.
- **Order Supplies** connects to the HP website and order genuine HP supplies, such as print cartridges and paper.
- **Product Support** connects to the support site for the HP Color LaserJet 5500 printer where you can search for help regarding general topics.

Using the HP Toolbox (HP Color LaserJet 5550 models)

The HP Toolbox is a Web application that you can use for the following tasks:

- Check the printer status.
- Configure the printer settings (access device Web page settings).
- View troubleshooting information.
- View online documentation.
- Print internal printer information pages.
- Receive pop-up status messages.

You can view the HP Toolbox when the printer is directly connected to your computer. If the printer is connected to a network, use **Custom Installer**. The HP Toolbox software is automatically installed as part of the typical software installation.

NOTE You do not have to have Internet access to open and use the HP Toolbox. However, if you click a link in the **Other Links** area, you must have Internet access to go to the site associated with the link. See Other links for more information.

Supported operating systems

HP Toolbox is supported for the following operating systems:

- Windows 98, 2000, Me, Server 2003, and XP
- Macintosh OS 10.2 or later

Supported browsers

To use the HP Toolbox, you must have one of the following browsers:

- Microsoft Internet Explorer 5.5 or later (Internet Explorer 5.2 or later for Macintosh)
- Netscape Navigator 7.0 or later (Netscape Navigator 7.0 or later for Macintosh)
- Opera Software ASA Opera™ 6.05 and 7.0 for Windows
- Safari 1.0 software for Macintosh

All pages can be printed from the browser.

To view HP Toolbox

On the **Start** menu, select **Programs**, select **HP Color LaserJet 5550**, and then select **HP LaserJet Toolbox**.

NOTE You can also view the HP Toolbox by clicking the system tray icon or the desktop icon.

The HP Toolbox opens in a Web browser.

NOTE Once you open the URL, you can bookmark it so that you can return to it quickly in the future.

HP Toolbox sections

The HP Toolbox software contains the following sections:

- Status tab
- Troubleshooting tab
- Alerts tab
- Documentation tab
- Device Settings button

Other links

Each page in the HP Toolbox contains links to the HP website for the following information:

- Product registration
- Product support
- Ordering supplies
- HP Instant Support™

You must have Internet access to use any of these links. If you use a dial-up connection and did not connect when you first opened the HP Toolbox, you must connect before you can visit these websites.

Status tab

The **Status** tab has links to the following main pages:

- **Device Status**. View printer status information. This page will indicate printer conditions such as a paper jam or an empty tray. Use the virtual control panel buttons on this page to change printer settings. After you correct a problem with the printer, click the **Refresh** button to update the device status.
- **Supplies Status**. View detailed supplies status such as the percent of toner remaining in the print cartridges and the number of pages printed with the current print cartridges. This page also has links to order supplies and to find recycling information.
- **Print Info Pages**. Print the configuration page and various other information pages that are available for the printer, such as the **Supplies Status** page, the **Demo** page, and **Menu Map**.

Troubleshooting tab

The **Troubleshooting** tab provides links to various printer troubleshooting information, such as how to clear a paper jam, how to resolve print quality problems, how to resolve other internal problems with the printer, and how to print some printer pages.

Alerts tab

The **Alerts** tab allows you to configure the printer to automatically notify you of printer alerts. The **Alerts** tab has links to the following main pages:

- Set up status alerts
- Administrative settings

Set up status alerts page

On the **Set up status alerts** page, you can choose to turn alerts on or off, specify when the printer should send an alert, and choose from two different types of alerts:

- A pop-up message
- A task bar icon

Click **Apply** to activate the settings.

Administrative settings page

On the **Administrative settings** page, you can set the frequency of how often the HP Toolbox checks for printer alerts. Three settings are available:

- Less often: every 15000 milliseconds
- Normal: every 8000 milliseconds
- More often: every 4000 milliseconds

If you want to reduce network I/O traffic, reduce the frequency that the printer checks for alerts.

Documentation tab

The **Documentation** tab contains links to these information sources:

- **User Guide**. Contains the information about the printer usage, warranty, specifications, and support that you are currently reading. The user guide is available in both HTML and PDF format.
- **Install Notes**. Contains installation information about the printer.

Device Settings button

Clicking the **Device Settings** button connects you to the printer's embedded Web server.

HP Toolbox links

The HP Toolbox links at the left of the screen provide links to the following options:

- **Select a device**. Select from all HP Toolbox-enabled devices.
- **View current alerts**. View the current alerts for all set up printers. (You must be printing to view current alerts.)
- **Text only page**. View HP Toolbox as a site map linking to text-only pages.

Printer Status and Alerts software

Printer Status and Alerts is supported only for Windows 95 and later versions.

The Printer Status and Alerts software is available to users of both networked and directly connected printers. To use Printer Status and Alerts software with a directly connected computer, you must choose the Custom installation option when you install the printer driver. Select the option to install Printer Status and Alerts. For network connections, Printer Status and Alerts is installed automatically with the Typical software installation option.

This software allows you to view the embedded Web server information for a particular printer. It also generates messages on the computer regarding the status of the printer and print jobs. Depending on how the printer is connected, you can receive different messages.

- **Networked printers**. You can receive regular job status messages that appear every time a print job is sent to the printer or every time the print job finishes printing. You can also receive alert messages. These messages appear when you are printing to a particular printer if that printer experiences a problem. In some cases, the printer can continue to print (such as when a tray that is not being used is open, or a print cartridge is low). In other cases, a problem may prevent the printer from printing (such as when paper is out, or a print cartridge is empty).
- **Directly connected printers**. You can receive alert messages that appear when the printer experiences a problem but can continue printing or a problem that prevents it from printing. You can also receive messages indicating the print cartridge is low.

You can set alert options for a single printer that supports Printer Status and Alerts, or you can set alert options for all printers that support Printer Status and Alerts. For networked printers, these alerts only appear for your jobs.

Note that even if you are setting alert options for all printers, not all options you select will apply to all printers. For example, when selecting the option to notify you when the print cartridges are low, directly connected printers that support Printer Status and Alerts will generate a message when the print cartridges are low. However, none of the networked printers will generate this message, unless it affects a user-specific job.

To choose which status messages appear

Use the following steps to choose which status messages appear.

1. Open Printer Status and Alerts in one of these ways:

   Double-click the **Printer Status and Alerts** tray icon, which is near the clock in the Tray Manager.

   On the Start menu, point to **Programs**, point to **Printer Status and Alerts**, and click **Printer Status and Alerts**.

2. Click the **Options** icon in the left pane.
3. In the **For** field, select the printer driver for this printer, or select **All Printers**.
4. Clear the options for the messages you do not want to appear, and select the options for the messages you do want to appear.
5. Under **Status check rate**, select how frequently you want the software to update the printer status information that the software uses to generate the messages. Status Check Rate might not be available if the printer administrator has restricted the rights to this function.

To view status messages and information

On the left side of the window, select the printer for which you want to see information. Information provided includes status messages, supplies status, and printer capabilities. You can also click the Job History (clock) icon at the top of the window to view a list of previous jobs sent to the printer from your computer.

Printer configuration page

Use the configuration page to view current printer settings, to help troubleshoot printer problems, or to verify installation of optional accessories, such as memory (DIMMs), paper trays, and printer languages.

1. Press ✔ to enter the **MENUS**.
2. Press ▼ to highlight **MENUS**.
3. Press ✔ to select **MENUS**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. Press ✔ to select **PRINT CONFIGURATION**.

The message **Printing... CONFIGURATION** appears on the display until the printer finishes printing the configuration page. The printer returns to the **Ready** state after printing the configuration page.

NOTE If the printer is configured with EIO cards (for example, an HP Jetdirect Print Server) or an optional hard disk drive, an additional configuration page will print that provides information about those devices.

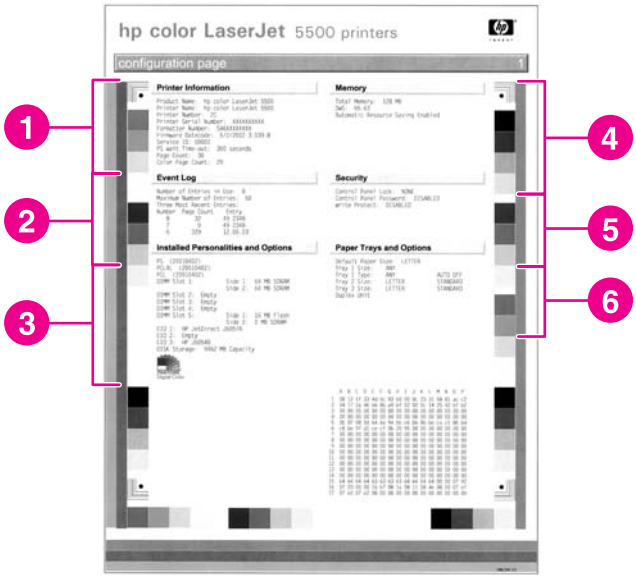


Figure 7-8. **HP Color LaserJet 5500 printer configuration page**

1 Printer information
2 Event log
3 Installed personalities and options
4 Memory
5 Security
6 Paper trays and options

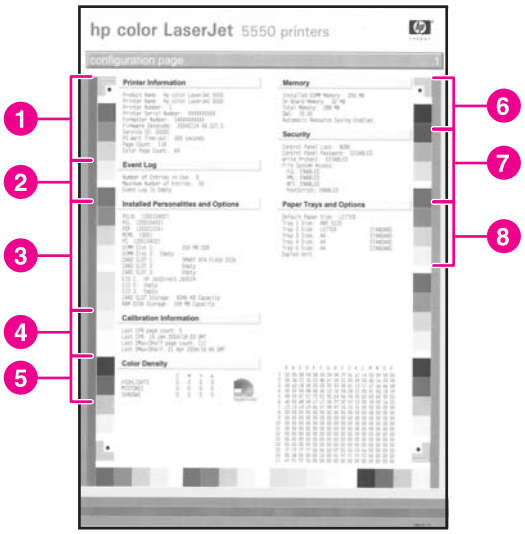


Figure 7-9. **HP Color LaserJet 5550 printer configuration page**

1 Printer information
2 Event log
3 Installed personalities and options
4 Calibration information
5 Color density
6 Memory
7 Security
8 Paper trays and options

Supplies status page

The supplies status page illustrates the remaining life for the following printer supplies:

- Print cartridges (all colors)
- Transfer unit
- Fuser

To print the supplies status page

1. Press ✔ to enter the **MENUS**.
2. Press ▼ to highlight **MENUS**.
3. Press ✔ to select **MENUS**.
4. Press ▼ to highlight **PRINT SUPPLIES STATUS PAGE**.
5. Press ✔ to select **PRINT SUPPLIES STATUS PAGE**.

The message **Printing... SUPPLIES STATUS** appears on the display until the printer finishes printing the supplies status page. The printer returns to the **Ready** state after printing the supplies status page.

NOTE If you are using non-HP supplies, the supplies status page will not show the remaining life for those supplies.

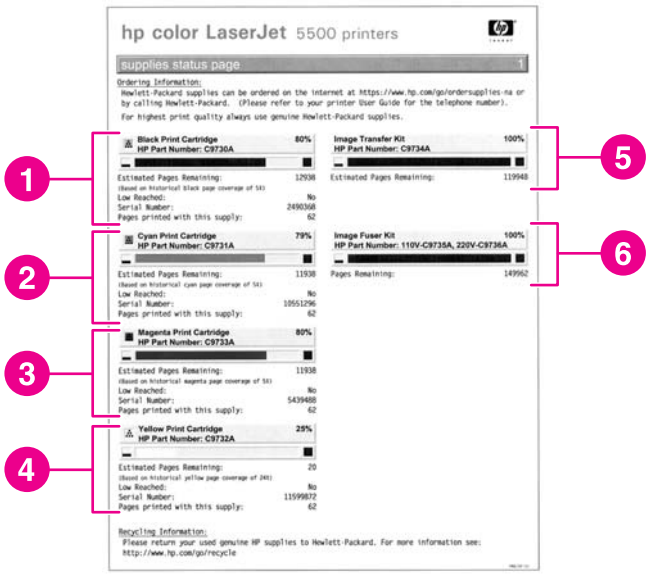


Figure 7-10. **Supplies status page for HP Color LaserJet 5550**

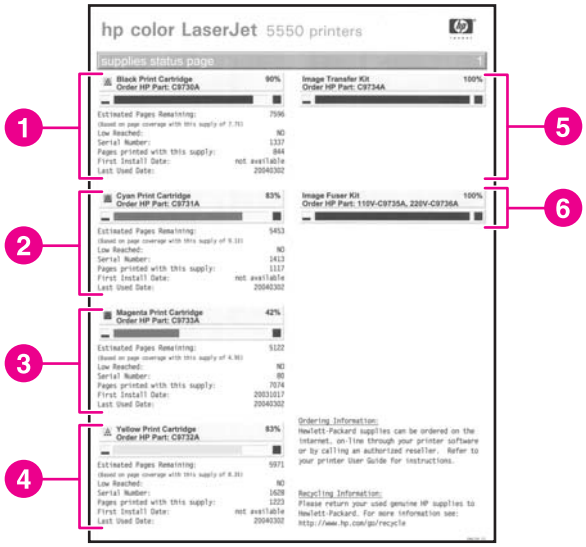


Figure 7-11. **Supplies status page for HP Color LaserJet 5500**

1 Black print cartridge information
2 Cyan print cartridge information
3 Magenta print cartridge information
4 Yellow print cartridge information
5 Image transfer kit (ETB) information
6 Image fuser kit information

Usage page

The usage page lists a page count for each size of media that has passed through the printer. This page count includes the number of pages that were printed on one side, the number that were printed on two sides (duplexed), and totals of the two printing methods for each media size. It also lists the average percentage of page coverage for each color.

To print the usage page

1. Press ✔ to enter the **MENUS**.
2. Press ▼ to highlight **MENUS**.
3. Press ✔ to select **MENUS**.
4. Press ▼ to highlight **PRINT USAGE PAGE**.
5. Press ✔ to select **PRINT USAGE PAGE**.

The message **Printing... USAGE PAGE** appears on the display until the printer finishes printing the usage page. The printer returns to the **Ready** state after printing the usage page.

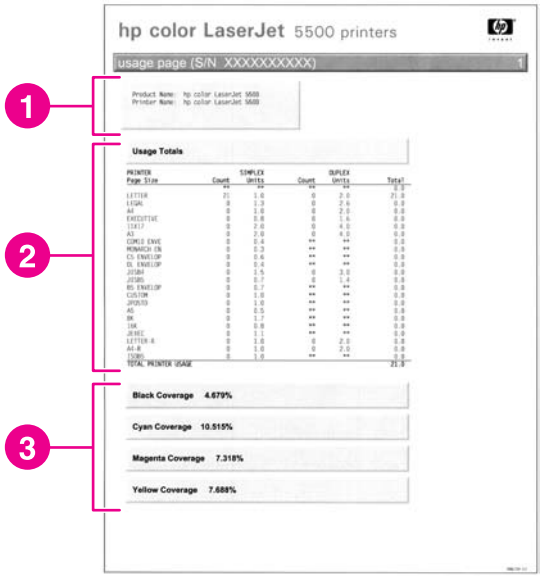


Figure 7-12. **Usage page for HP Color LaserJet 5500**

1 Printer identification information
2 Usage totals
3 Historical printer coverage by color

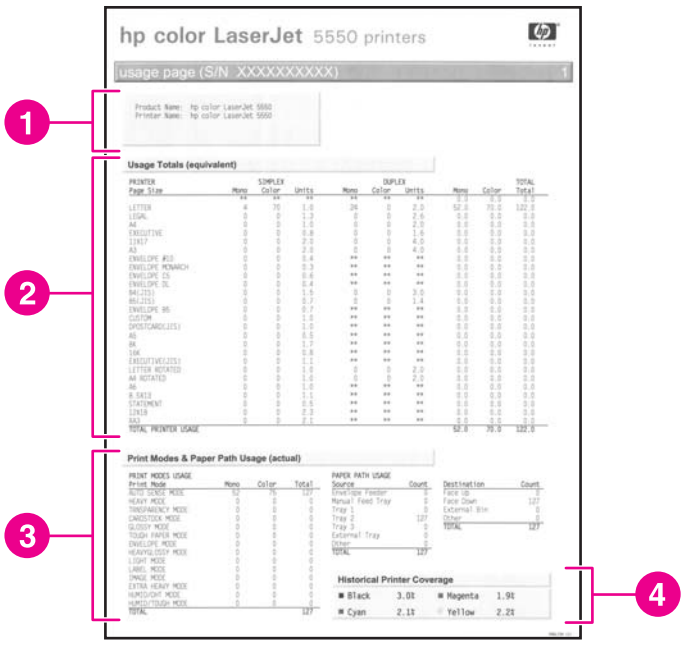


Figure 7-13. **Usage page for HP Color LaserJet 5550**

1 Printer identification information
2 Usage totals
3 Print modes and paper path usage
4 Historical printer coverage by color

Event log

The event log lists the printer events, including printer jams, service errors, and other printer conditions.

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to enter the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PRINT EVENT LOG**.
5. Press ✔ to select **PRINT EVENT LOG**.

The message **Printing... EVENT LOG** appears on the display until the printer finishes printing the event log. The printer returns to the **Ready** state after printing the event log.

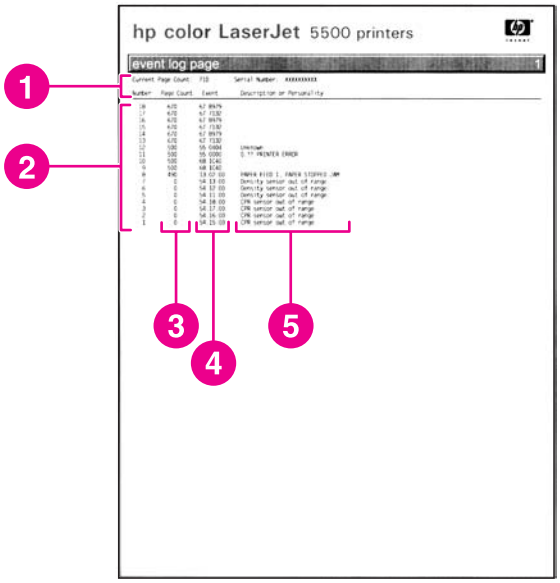


Figure 7-14. **Event log for HP Color LaserJet 5500**

1 Current page count and printer serial number
2 Event number (the most recent is at the top of the list)
3 Error code
4 Page count at which the event occurred
5 Description of the event

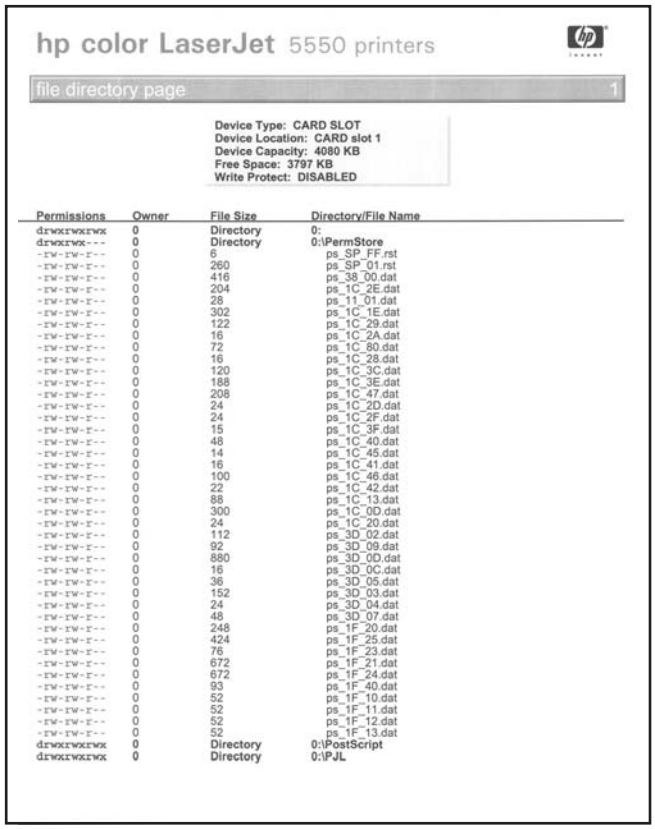
Print the file directory page

The file directory page lists the files and directories that are stored in printer memory or on the hard drive (not all printer models come with a hard drive).

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT FILE DIRECTORY**.
5. Press ✔ to select **PRINT FILE DIRECTORY**.

The message **Printing... FILE DIRECTORY** appears on the control panel display until the printer finishes printing the file directory page. The printer returns to the **Ready** state after printing the file directory page.

NOTE The file directory page for the HP Color LaserJet 5550 models contains the same file directory page information as the page shown below.



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file directory page 1

Device Type: CARD SLOT
Device Location: CARD slot 1
Device Capacity: 4080 KB
Free Space: 3797 KB
Write Protect: DISABLED

Permissions	Owner	File Size	Directory/File Name
drwxrwxrwx	0	Directory	0:
drwxrwx---	0	Directory	0:\PermStore
-rw-rw-r--	0	6	ps_SP_FF.rst
-rw-rw-r--	0	260	ps_SP_01.rst
-rw-rw-r--	0	416	ps_38_00.dat
-rw-rw-r--	0	204	ps_1C_2E.dat
-rw-rw-r--	0	28	ps_11_01.dat
-rw-rw-r--	0	302	ps_1C_1E.dat
-rw-rw-r--	0	122	ps_1C_29.dat
-rw-rw-r--	0	16	ps_1C_2A.dat
-rw-rw-r--	0	72	ps_1C_80.dat
-rw-rw-r--	0	16	ps_1C_28.dat
-rw-rw-r--	0	120	ps_1C_3C.dat
-rw-rw-r--	0	188	ps_1C_3E.dat
-rw-rw-r--	0	208	ps_1C_47.dat
-rw-rw-r--	0	24	ps_1C_2D.dat
-rw-rw-r--	0	24	ps_1C_2F.dat
-rw-rw-r--	0	15	ps_1C_3F.dat
-rw-rw-r--	0	48	ps_1C_40.dat
-rw-rw-r--	0	14	ps_1C_45.dat
-rw-rw-r--	0	16	ps_1C_41.dat
-rw-rw-r--	0	100	ps_1C_46.dat
-rw-rw-r--	0	22	ps_1C_42.dat
-rw-rw-r--	0	88	ps_1C_13.dat
-rw-rw-r--	0	300	ps_1C_0D.dat
-rw-rw-r--	0	24	ps_1C_20.dat
-rw-rw-r--	0	112	ps_3D_02.dat
-rw-rw-r--	0	92	ps_3D_09.dat
-rw-rw-r--	0	880	ps_3D_0D.dat
-rw-rw-r--	0	16	ps_3D_0C.dat
-rw-rw-r--	0	36	ps_3D_05.dat
-rw-rw-r--	0	152	ps_3D_03.dat
-rw-rw-r--	0	24	ps_3D_04.dat
-rw-rw-r--	0	48	ps_3D_07.dat
-rw-rw-r--	0	248	ps_1F_20.dat
-rw-rw-r--	0	424	ps_1F_25.dat
-rw-rw-r--	0	76	ps_1F_23.dat
-rw-rw-r--	0	672	ps_1F_21.dat
-rw-rw-r--	0	672	ps_1F_24.dat
-rw-rw-r--	0	93	ps_1F_40.dat
-rw-rw-r--	0	52	ps_1F_10.dat
-rw-rw-r--	0	52	ps_1F_11.dat
-rw-rw-r--	0	52	ps_1F_12.dat
-rw-rw-r--	0	52	ps_1F_13.dat
drwxrwxrwx	0	Directory	0:\PostScript
drwxrwxrwx	0	Directory	0:\PJL

Figure 7-15. **File directory page for HP Color LaserJet 5550 models**

Print the PCL font list page

The PCL font list page list the PCL fonts that are available on the printer.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT PCL FONT LIST**.
5. Press ✔ to select **PRINT PCL FONT LIST**.

The message **PRINTING... PCL FONT LIST** appears on the control panel display until the printer finishes printing the PCL fonts list page. The printer returns to the **Ready** state after printing the PCL font list page.

NOTE The PCL font list page for the HP Color LaserJet 5550 models contains the same PCL font list page information as the page shown below.

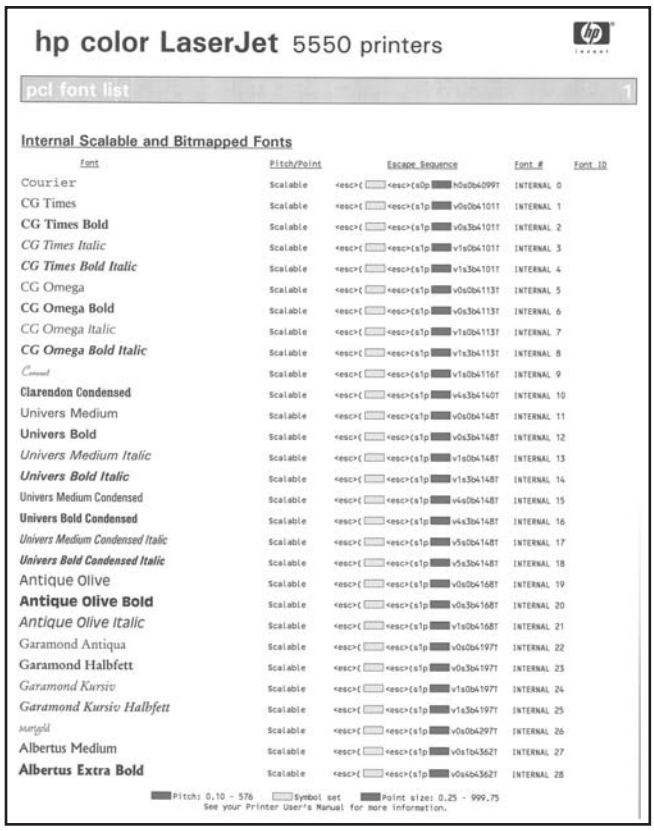


Figure 7-16. **PCL font list page (shown is for HP Color LaserJet 5550 models)**

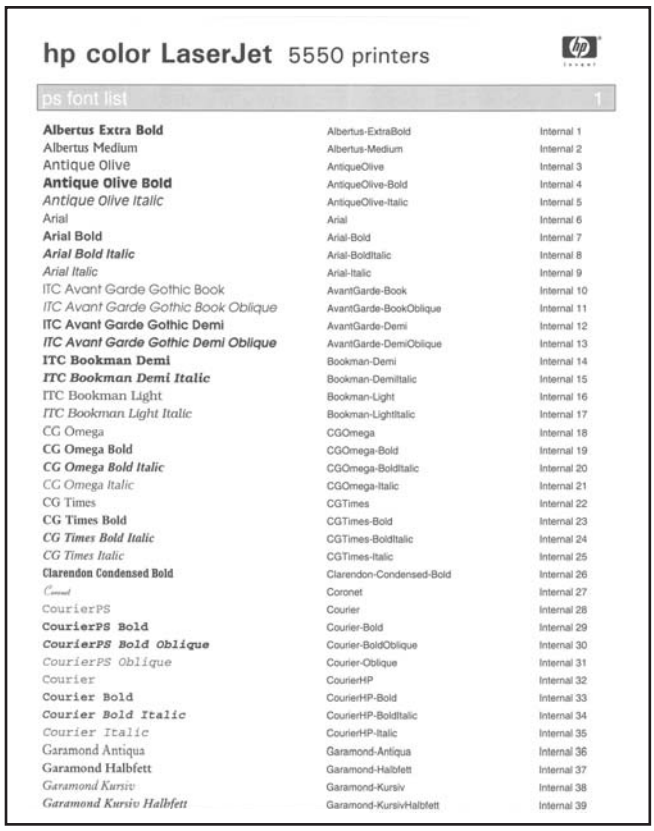
Print the PS font list page

The PS font list page list the PS fonts (emulated PostScript) that are available on the printer.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT PS FONT LIST**.
5. Press ✔ to select **PRINT PS FONT LIST**.

The message **PRINT PS FONT LIST** appears on the control panel display until the printer finishes printing the PS fonts list page. The printer returns to the **Ready** state after printing the PS font list page.

NOTE The PS font list page for the HP Color LaserJet 5500 models contains the same PS font list page information as the page shown below.



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ps font list 1

Albertus Extra Bold	Albertus-ExtraBold	Internal 1
Albertus Medium	Albertus-Medium	Internal 2
Antique Olive	AntiqueOlive	Internal 3
Antique Olive Bold	AntiqueOlive-Bold	Internal 4
Antique Olive Italic	AntiqueOlive-Italic	Internal 5
Arial	Arial	Internal 6
Arial Bold	Arial-Bold	Internal 7
Arial Bold Italic	Arial-BoldItalic	Internal 8
Arial Italic	Arial-Italic	Internal 9
ITC Avant Garde Gothic Book	AvantGarde-Book	Internal 10
ITC Avant Garde Gothic Book Oblique	AvantGarde-BookOblique	Internal 11
ITC Avant Garde Gothic Demi	AvantGarde-Demi	Internal 12
ITC Avant Garde Gothic Demi Oblique	AvantGarde-DemiOblique	Internal 13
ITC Bookman Demi	Bookman-Demi	Internal 14
ITC Bookman Demi Italic	Bookman-DemiItalic	Internal 15
ITC Bookman Light	Bookman-Light	Internal 16
ITC Bookman Light Italic	Bookman-LightItalic	Internal 17
CG Omega	CGOmega	Internal 18
CG Omega Bold	CGOmega-Bold	Internal 19
CG Omega Bold Italic	CGOmega-BoldItalic	Internal 20
CG Omega Italic	CGOmega-Italic	Internal 21
CG Times	CGTimes	Internal 22
CG Times Bold	CGTimes-Bold	Internal 23
CG Times Bold Italic	CGTimes-BoldItalic	Internal 24
CG Times Italic	CGTimes-Italic	Internal 25
Clarendon Condensed Bold	Clarendon-Condensed-Bold	Internal 26
Coronet	Coronet	Internal 27
CourierPS	Courier	Internal 28
CourierPS Bold	Courier-Bold	Internal 29
CourierPS Bold Oblique	Courier-BoldOblique	Internal 30
CourierPS Oblique	Courier-Oblique	Internal 31
Courier	CourierHP	Internal 32
Courier Bold	CourierHP-Bold	Internal 33
Courier Bold Italic	CourierHP-BoldItalic	Internal 34
Courier Italic	CourierHP-Italic	Internal 35
Garamond Antiqua	Garamond-Antiqua	Internal 36
Garamond Halbfett	Garamond-Halbfett	Internal 37
Garamond Kursiv	Garamond-Kursiv	Internal 38
Garamond Kursiv Halbfett	Garamond-KursivHalbfett	Internal 39

Figure 7-17. **PS font list page (shown is for HP Color LaserJet 5550 models)**

Print the RGB samples page (HP Color LaserJet 5550 models)

The RGB samples page is used for RGB color matching on the HP Color LaserJet 5550 models.

1. Press MENU to open the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT RGB SAMPLES**.
5. Press ✔ to select **PRINT RGB SAMPLES**.

The message **Printing... RGB Samples** appears on the control panel display until the printer finishes printing the RGB samples page. The printer returns to the **Ready** state after printing the RGB samples page.

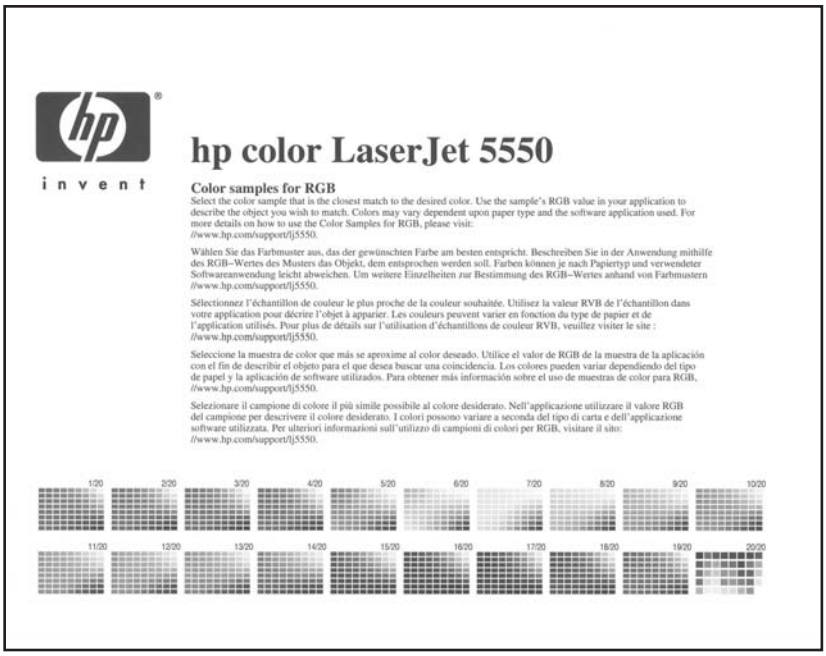


Figure 7-18. **RGB samples page (shown for the HP Color LaserJet 5550 models)**

Print the CMYK samples page (HP Color LaserJet 5550 models)

The CMYK samples page is used for CMYK color matching on the HP Color LaserJet 5550 models.

1. Press MENU to open the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CMYK SAMPLES**.
5. Press ✔ to select **PRINT CMYK SAMPLES**.

The message **Printing... CMYK Samples** appears on the control panel display until the printer finishes printing the CMYK samples page. The printer returns to the **Ready** state after printing the CMYK samples page.

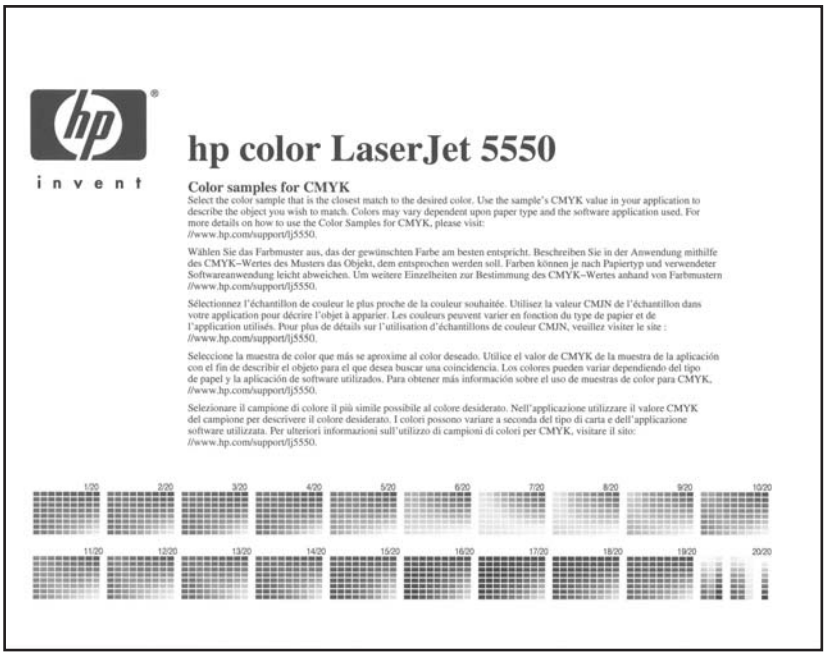


Figure 7-19. **CMYK samples page (shown for the HP Color LaserJet 5550 models)**

Diagnostics

This section describes the procedures to be used to perform diagnostics.

LED diagnostics

Use the following procedure to help identify the cause of high-level printer problems. These problems are indicated by abnormalities in the printer's power-on sequence. The LED that the procedure refers to is on the formatter. This is a “heartbeat” LED that blinks on and off when the formatter is operating correctly. Use Figure 7-20. Formatter LED (shown is HP Color LaserJet 5500 model) and Figure 7-21. Formatter LED (shown is HP Color LaserJet 5550 model) to locate the formatter LED.

1. Does the LED blink with four fast bursts at power on? If not, then perform the following checks.
   - Check the firmware.
   - Check the memory.
   - Check the formatter.
2. Does the LED blink at a fast, steady rate during memory testing (one blink per 8 MB)? If not, then perform the following checks.
   - Check the control panel display for an error code.
   - Check the memory.
   - Check the formatter.
3. Is the LED off for about eight seconds, while the boot code is decompressing, before the display turns on? If not, then perform the following checks.
   - Check the firmware.
   - Check the control panel display for correct connections and operation.
   - Check the control panel display for an error code.

4. Does the LED blink at a steady rate of one blink per second? If not, then perform the following checks.
   - Check the firmware.
   - Check the formatter.
   - Check the control panel display for an error code.
5. If the control panel display does not illuminate, perform an engine test to check the engine. You must have paper loaded in Tray 2 for the engine test.

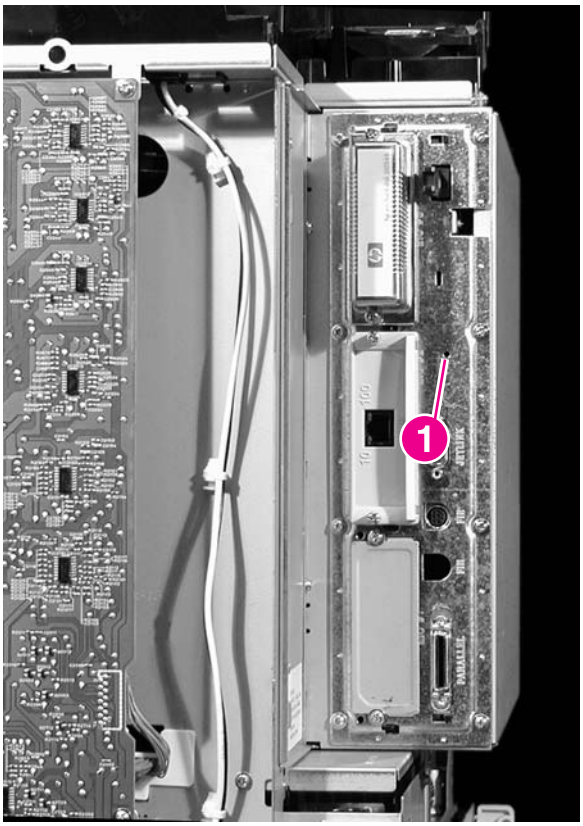


Figure 7-20. **Formatter LED (shown is HP Color LaserJet 5500 model)**

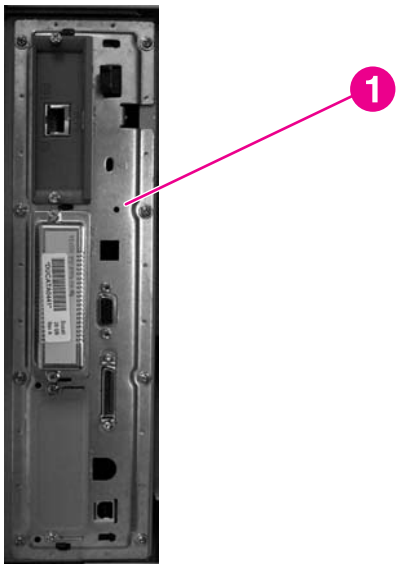


Figure 7-21. **Formatter LED (shown is HP Color LaserJet 5550 model)**

Engine diagnostics

This section provides an overview of the engine diagnostics incorporated into the HP Color LaserJet 5500 series printer. The printer contains extensive internal diagnostics that help in troubleshooting print quality issues, paper path issues, noise issues, component issues, and timing issues.

Diagnostics mode

Some of the diagnostic tests automatically put the printer into a special diagnostics mode. The special diagnostics mode allows the printer to perform actions that it normally could not because the printer would enter an error state. Always follow the control panel directions in the Diagnostic menu to properly exit the special diagnostics mode and return the printer to a normal state.

Diagnostics that put the engine into the special diagnostics mode

There are three diagnostic tests that put the engine into a special state:

- Disable cartridge check
- Sensor test
- Component test

While the printer is in the special diagnostics mode, the display should read:

Ready Diagnostics mode

To exit, press CANCEL JOB for the HP Color LaserJet 5500 or STOP for the HP Color LaserJet 5550.

When the printer is in the special diagnostics mode, the three tests listed above appear in the menu and are available to be run. To access other diagnostic tests or to leave the special state, press the CANCEL JOB button (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550), and then select **EXIT DIAGNOSTICS**. The printer will reset itself, and then return to the normal state.

NOTE To access the main menu and get to the diagnostics menu when the engine is in an error state, such as when a cartridge is missing, you do not have to turn the printer off and then on again or resolve the error state before proceeding with the diagnostics tests. Simply open the top cover to release the door switch, which will allow you to navigate the main menu and access the diagnostics menu.

NOTE A good understanding of how the printer operates is required to use the engine diagnostics successfully. Before proceeding with these diagnostic tests, be sure you understand the information in Theory of operation.

Diagnostics tests

Different tests can be used to isolate different types of issues. For component or noise isolation, you can run the diagnostics with the covers removed. Removing the rear cover, top cover, rear top cover, and side covers provides a better view of the areas being tested. To operate the printer with the covers removed, defeat the door switch (SW1, callout 1) and depress the ETB connector (callout 2) after closing the ETB.

WARNING! Take caution when performing printer diagnostics to avoid risk of injury. Only trained service personnel should access and run the diagnostics with the covers removed. Never touch any of the power supplies with the printer turned on.

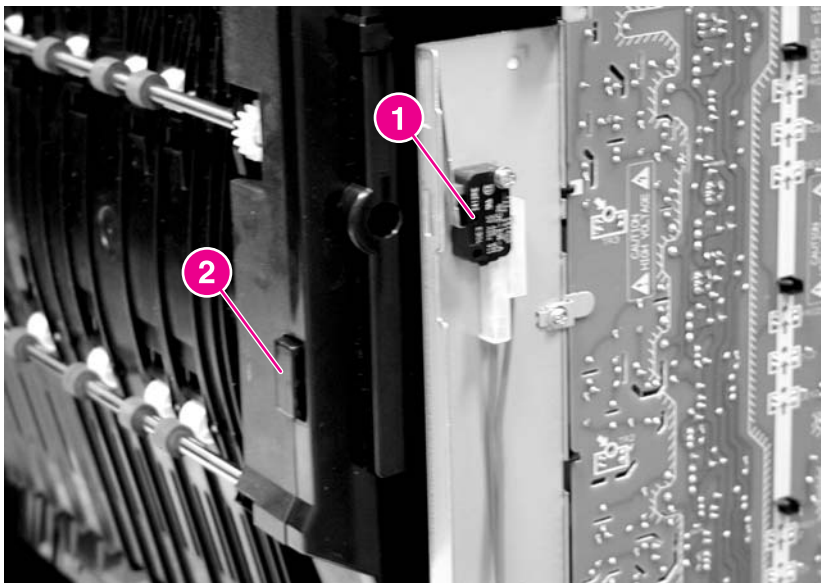


Figure 7-22. **Door switch and ETB connector**

NOTE Any time a cartridge is installed or removed while the covers are removed, the door interlock must be cycled to simulate opening and closing the top cover in order for the engine to recognize the change. The ETB must be closed and its connector must be depressed before cycling the door switch, or the printer will generate a 59.90 Printer Error. With covers installed, the door switch and ETB connector are automatically operated. With covers removed, you must manually perform these steps.

Diagnostics from the control panel

The following sections explain in more detail how to operate the various diagnostics properly.

Print the event log page

The event log lists printer events, including jams, service errors, and other printer conditions.

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PRINT EVENT LOG**.
5. Press ✔ to select **PRINT EVENT LOG**.

The message **Printing... EVENT LOG** appears on the control panel display until the printer finishes printing the event log. The printer returns to the **Ready** state after printing the event log.

View the event log on the control panel display

The show event log lists the last 50 printer events on the control panel display. (The most recent event is listed first).

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 550) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **SHOW EVENT LOG**.
5. Press ✔ to select **SHOW EVENT LOG**.

PQ troubleshooting

This item prints a series of print quality assessment pages that help troubleshoot print quality problems.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PQ TROUBLESHOOTING**.
5. Press ✔ to select **PQ TROUBLESHOOTING**.

Disable cartridge check (special mode test)

This diagnostic test allows you to print internal pages or send an external job to the printer with one or more print cartridges removed or swapped. Because the cartridges are not keyed, the diagnostic test can be run with one to four cartridges removed or swapped to another location. Consumable supply errors are ignored while in this mode. Once in this mode, you can navigate the menus and print internal pages or send an external print job to the printer. This diagnostic test can be used to isolate print quality problems related to individual cartridges and to isolate individual cartridge problems such as noise.

NOTE Do not remove or swap cartridges before entering the disable cartridge check diagnostic. After entering the test, you can remove or swap cartridges.

While performing the disable cartridge check, you can navigate the menus and print internal pages as desired from the control panel. Use the ✔ button to access the menus as you normally would. You can also send external print jobs to the printer.

To exit this diagnostic, press the CANCEL JOB (HP Color LaserJet 5500 models) or STOP (HP Color LaserJet 5550 models) button and then select **EXIT DIAGNOSTICS**.

Paper path sensors (HP Color LaserJet 5550 models)

This special mode test allows you to test the printer's sensors for proper operation. Each sensor is represented by a letter. A one below the letter on the display indicated paper is present. This test allows you to print internal pages or send an external job to the printer.

Manual sensor test (HP Color LaserJet 5550 models)

This test allows you to manually test paper path sensors and the door-open switch. Each sensor is represented by a letter.

Paper path sensor test (HP Color LaserJet 5550 models)

This test displays the status of each paper path sensor.

1. Press MENU to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PAPER PATH TEST**.
5. Press ✔ to select **PAPER PATH TEST**.
6. The printer displays a message similar to:

   ABCDEF....

   010010....

NOTE The number of alpha and numeric characters varies according to the number of input paper sheet feeders that are installed.

7. To exit, press STOP.
8. The printer displays the message NO JOB TO CANCEL, and enters the ready dignostics mode. To exit, press STOP.
9. The printer displays the message **DIAGNOSTICS**. Press ▼ to highlight **EXIT DIAGNOSTICS**.
10. Press ✔ to select **EXIT DIAGNOSTICS**.
11. The printer displays the message WAITING FOR PRINTER TO RE-INITIALIZE.

The printer will return to the Ready state once initialization is complete.

Paper path test (HP Color LaserJet 5500 models)

This diagnostic test generates one or more test pages that you can use to isolate the cause of jams.

To isolate a problem, you can specify which input tray to use, specify whether to use the duplex path, and specify the number of copies to print. Multiple copies can be printed to help isolate intermittent problems. The following options become available after you start the diagnostic feature:

- **Print test page**. Run the paper path test from the default settings: Tray 2, no duplex, and one copy. To specify other settings, scroll down the menu and select the setting, and then scroll back up and select **PRINT TEST PAGE** to start the test.
- **Source**. Select Tray 1 or Tray 2. Trays 3, 4, or 5 (HP Color LaserJet 5550 models only) are optional.
- **Duplex**. Enable or disable 2-sided printing.
- **Copies**. Set the numbers of copies to be printed; the choices are 1,10, 50, 100, or 500.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PAPER PATH TEST**.
5. Press ✔ to select **PAPER PATH TEST**.
6. Select the paper path test options when the printer prompts you.

Sensor test (special mode test)

This diagnostic test allows you to test the printer's sensors and switches for proper operation. Each sensor is represented by a letter, as indicated in Table 7-48. Sensor test letter codes. A one below the letter indicates paper is present. For the paper size sensor, the range of values is from 0 to 7. Table 7-49. Tray 2 paper size codes indicates the switch state and paper size associated with each of these values.

Table 7-48. Sensor test letter codes

Letter	Sensor	Sensor/switch number	Idle value (doors closed, paper in Trays 1 and 2)
A	top of page	PS801	0
B	fuser inlet/ speed	PS8	1
C	fuser delivery	PS7	0
D	output bin full	PS6	0
E	MP tray paper presence	PS802	0
F	Tray 2 paper presence	PS601	0
G	Tray 2 paper width	SW1, SW2, SW3	0 - 7 (see Table 7-49. Tray 2 paper size codes)
H	Tray 2 paper length	SW4, SW5, SW6	0 - 7 (see Table 7-49. Tray 2 paper size codes)
I	Tray 3 paper presence	PS503	0
J	Tray 3 paper width	SW501,502, 503	0 - 7 (see Table 7-49. Tray 2 paper size codes)
K	Tray 3 paper length	SW504, 505, 506	0 - 7 (see Table 7-49. Tray 2 paper size codes)
L	Tray 4 paper presence	PS503	0
M	Tray 4 paper width	SW501,502, 503	0 - 7 (see Table 7-49. Tray 2 paper size codes)

Table 7-48. Sensor test letter codes (continued)

Letter	Sensor	Sensor/switch number	Idle value (doors closed, paper in Trays 1 and 2)
N	Tray 4 paper length	SW504, 505, 506	0 - 7 (see Table 7-49. Tray 2 paper size codes)
O (HP Color LaserJet 5500 models only)	Door	SW1	1
O (HP Color LaserJet 5550 models only)	Tray 5 paper presence	PS503	0
P (HP Color LaserJet 5550 models only)	Tray 5 paper width	SW501, 502, 503	0 - 7 (see Table 7-49. Tray 2 paper size codes)
Q (HP Color LaserJet 5550 models only)	Tray 5 paper length	SW504, 505, 506	0 - 7 (see Table 7-49. Tray 2 paper size codes)
R (HP Color LaserJet 5550 models only)	Door	SW1	1

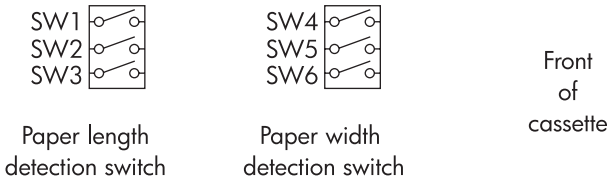


Figure 7-23. **Tray 2 paper size switch arrangement**

Table 7-49. Tray 2 paper size codes

Paper size	Paper length detection switch			Paper width detection switch		
	SW1	SW2	SW3	SW4	SW5	SW6
A3	on	off	on	on	off	na
A4 landscape	off	off	on	on	off	na
A4 portrait	on	off	off	off	off	na
11 x 17 inches	on	off	on	on	on	na
Letter landscape	off	off	on	on	on	na
Letter portrait	on	on	off	off	off	na
B4	on	off	on	off	on	na
B5 portrait	off	on	on	off	off	na
Legal	on	off	on	off	off	na

Table 7-49. Tray 2 paper size codes (continued)

Paper size	Paper length detection switch			Paper width detection switch		
Executive	off	on	off	off	off	na
A5 portrait	off	off	on	off	off	na
Custom	on	on	on	na	na	na
No cassette	off	off	off	off	off	off

NOTE

Depressing all three switches of the Tray 2 paper size levers to cause the control panel to display the custom paper menu. Press the ⮌ button to return to the sensor diagnostic display.

To toggle a sensor, find and move the sensor flags in the following locations:

- **A**. Remove Tray 2. The flag is located in the center paper inlet path of the paper pickup unit, directly in front of right-side white roller. The flag is recessed above the registration shutter in the paper pickup unit.

WARNING!

The fuser might be hot; wait 10 minutes for it to cool down.

- **B**. Open the ETB and wait for the fuser to cool down. The fuser inlet flag is in located at the front center of the fuser. Access the flag from above the black print cartridge.
- **C**. The fuser delivery flag is located at the upper center of fuser, behind the fuser Caution label. It is wrapped in a clear roller.
- **D**. The output bin full sensor is located on upper rear edge of the fuser.
- **E**. Remove Tray 2. The Tray 1 (MP tray) paper presence sensor flag is the black lever on the front right of the paper tray cavity. The Tray 2 paper length sensor (H) must be activated for the MP paper presence sensor to change states.
- **F**. Remove Tray 2. The Tray 2 paper presence sensor flag is the black lever in the middle center of the paper tray cavity.
- **G**. Remove Tray 2. The Tray 2 paper width detection switches are located on the left side of the paper tray cavity. They are the front set of sensors.
- **H**. Remove Tray 2. The Tray 2 paper length detection switches are located on the left side of the paper tray cavity. They are the rear set of sensors.
- **I**. Remove Tray 3. The Tray 3 paper presence sensor flag is the black lever in the middle center of the paper tray cavity.
- **J**. Remove the left cover of Tray 3. The Tray 3 paper width detection switches are located on the left side of the paper tray cavity. They are the front set of sensors.
- **K**. Remove the left cover of Tray 3. The Tray 3 paper length detection switches are located on the left side of the paper tray cavity. They are the rear set of sensors.
- **L**. Remove Tray 4. The Tray 4 paper presence sensor flag is the black lever in the middle center of the paper tray cavity.
- **M**. Remove the left cover of Tray 4. The Tray 4 paper width detection switches are located on the left side of the paper tray cavity. They are the front set of sensors.
- **N**. Remove the left cover of Tray 4. The Tray 4 paper length detection switches are located on the left side of the paper tray cavity. They are the rear set of sensors.
- **O**. The door switch is located on the right front of the printer frame (underneath the right cover). HP Color LaserJet 5500 models only.
- **O**. Remove Tray 5 (HP Color LaserJet 5550). The Tray 5 paper presence sensor flag is the black lever in the middle center of the paper tray cavity.

- **P**. Remove the left cover of Tray 5 (HP Color LaserJet 5550 only). The Tray 5 paper width detection switches are located on the left side of the paper tray cavity. They are the front set of sensors.
- **Q**. Remove the left cover of Tray 5 (HP Color LaserJet 5550 only). The Tray 5 paper length detection switches are located on the left side of the paper tray cavity. They are the rear set of sensors.
- **R**. The door switch is located on the right front of the printer frame (underneath the right cover). (HP Color LaserJet 5550 only.)

Manual sensor test (special mode test; HP Color LaserJet 5550 models)

Use this test to test paper-path sensors and the door-open switch manually. The following illustrations and tables show the locations of these sensors.

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **MANUAL SENSOR TEST**.
5. Press ✔ to select **MANUAL SENSOR TEST**.

6. Open and close doors or move sensor flags to see the sensor status change on the control panel display.

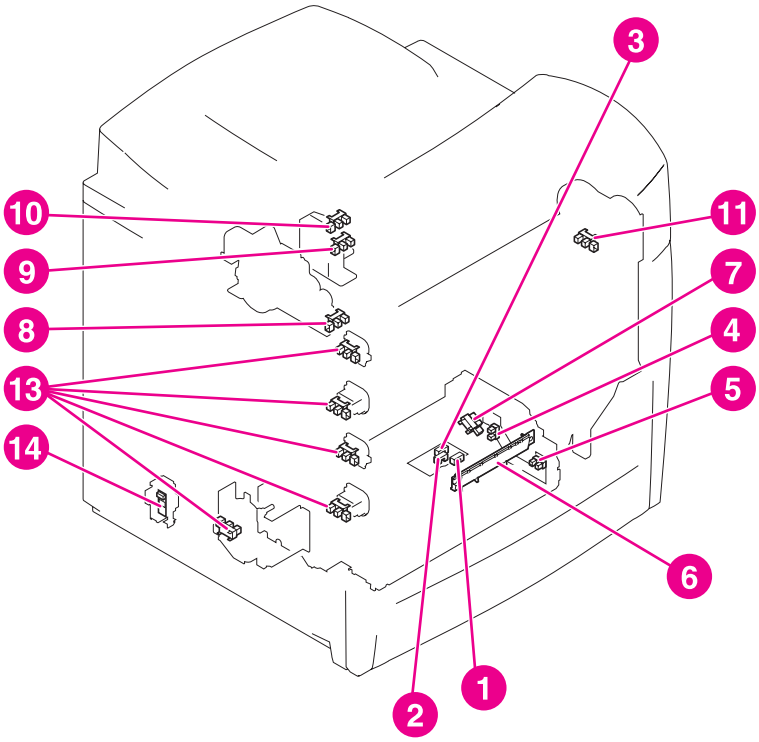


Figure 7-24. **Location of sensors**

1 Cassette paper sensor (PS901)
2 Paper stuck surface sensor (PS902)
3 Paper feed sensor (PS9)
4 Multi-purpose tray paper sensor (PS802)
5 Top of page sensor (PS801)
6 Horizontal registration/transparency sensor (IS1)
7 Pick-up sensor (PS9)
8 Fusing paper sensor (PS8)
9 Fusing delivery paper sensor (PS7)
10 Output bin full sensor (PS6)
11 ETB speed sensor (HP Color LaserJet 5500 models) (PS10)
12 Cartridge home position sensors (PS1, 2, 3, and 4)
13 Developing disengaging sensor (PS5)
14 Environmental sensor (HP Color LaserJet 5550 models) (TEMPSNS HUMSNS)

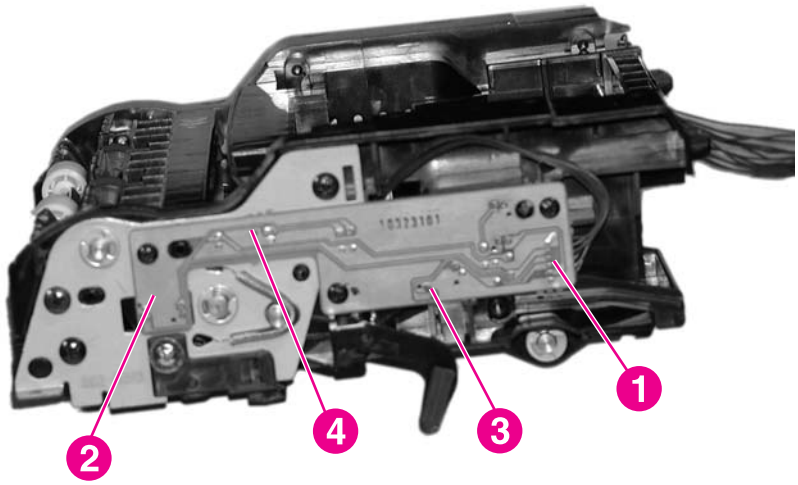


Figure 7-25. **Sensors on the paper pickup unit (the sensors are on the back side of the PCA)**

1 Cassette-paper sensor (PS1)
2 Multipurpose-tray paper sensor (PS2)
3 Paper leading-edge sensor (PS3)
4 Overhead transparency sensor (PS4)

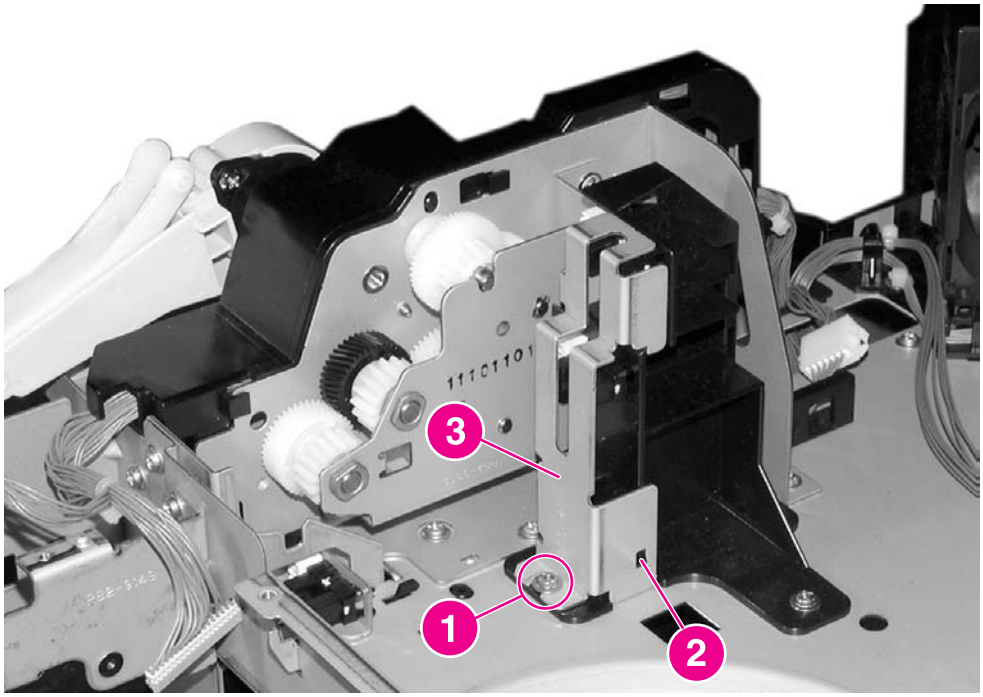


Figure 7-26. **Fuser sensors and output bin full sensor**

1 Fuser inlet paper sensor (PS8)
2 Fuser delivery sensor (PS7)
3 Output bin full sensor (PS6)

Table 7-50. Sensors

Name	Function
PS1	cyan drum home position sensor
PS2	yellow drum home position sensor
PS3	magenta drum home position sensor
PS4	black drum home position sensor
PS5	developing disengaging sensor
PS6	output bin full sensor
PS7	fuser delivery sensor
PS8	fuser paper sensor
PS9	pickup sensor
PS10	ETB speed sensor (HP Color LaserJet 5500 models only)
PS801	top of page sensor
PS802	MP tray paper presence sensor
PS901	cassette (Tray 2) paper sensor
PS902	paper stack surface sensor
PS903	paper feed sensor
IS1	horizontal registration/transparency sensor
Tempsns, Humsns	Environment sensor (HP Color LaserJet 5550 models only)

Table 7-51. Sensors

Name	Function
PS1	Cassette-paper present sensor
PS2	Multipurpose-tray paper present sensor
PS3	Paper leading-edge sensor
PS4	Overhead transparency sensor
PS5	Developing disengagement sensor
PS6	Cyan drum home position sensor
PS7	Yellow drum home position sensor
PS8	Magenta drum home position sensor
PS9	Black drum home position sensor
PS10	ETB speed sensor (HP Color LaserJet 5500 models only)

Table 7-51. Sensors (continued)

Name	Function
PS11	Fuser inlet paper sensor
PS12	Fuser delivery sensor
PS13	Output bin paper-full sensor

Component test (special mode test)

The component test allows you to exercise individual parts independently to isolate problems.

Each component test can be exercised once or repeatedly. If **CONTINUOUS** is selected as the repeat option, the test will cycle the component on and off. This process will repeat for 2 minutes, and then the test will terminate.

NOTE The door interlock switch must be defeated to run any of the component tests. If covers are removed, the door switch must be manually cycled during some tests in order for the engine to recognize a change. The ETB assembly can be open, closed, or removed while some of these tests are executing. Print cartridges can be installed or removed during certain tests. The control panel display prompts for removal of some or all cartridges during certain tests in order to rotate and isolate certain components, as well as to protect the cartridges and ETB.

1. Press ✔ (HP Color LaserJet 5500 models) or MENU (HP Color LaserJet 5550 models) to open the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **COMPONENT TEST**.
5. Press ✔ to select **COMPONENT TEST**.
6. Select the component test options when prompted by the printer.

The following component tests can be executed:

- **Transfer motors**. This test turns the components involved in the image transfer process: the cartridge motors, the ETB motor and belt (if the ETB is closed and the connector is seated), and the print cartridges (if the ETB is closed). You can remove or install print cartridges during this test.
- **Belt only**. This test turns only the ETB motor and belt. The ETB must be closed and the connector seated. The display prompts you to remove the cartridges because the ETB belt contacts the photosensitive drums and cannot turn without them rotating also. Rotating the photosensitive drums could damage the belt or photosensitive drums. If covers are removed, you must manually cycle the door switch after removing the cartridges for the test to execute.
- **Cartridge motors**. This test rotates only the print cartridge drive motors. The display prompts you to remove at least one cartridge for the same reason as stated for the Belt only test. The engine rotates the cartridge motor(s) for only the cartridges that are removed. To rotate all motors sequentially, remove all cartridges; to isolate one motor, remove only that cartridge. If covers are removed, you must manually cycle the door switch after removing the cartridges for the test to execute. Always start this test with all cartridges installed, and cycle the door switch so the printer recognizes the configuration. Then proceed with the test, removing one or more cartridges.
- **Black, Magenta, Yellow, Cyan laser/scanners**. These four tests allow you to rotate each scanner motor individually.
- **Fuser motor**. This test rotates the fuser motor and drive gears.

- **Alienation motor** (also called the developing disengaging motor). This test moves the developing disengaging rod, clutches, and plates through their three positions:
  - Clean/Home: middle position; all cartridges disengaged; used during cleaning cycle
  - Color: top position; no cartridges disengaged; used during color printing
  - Black: lowest position; C, M, and Y cartridges disengaged, black engaged; used during black-only printing
- **Tray 1 solenoid/Tray 2 clutch**. This test activates and releases the Tray 1 solenoid and the Tray 2 clutch. Tray 2 must be installed or the Tray 2 paper length sensors (the rear set of sensors) must be activated for this test to operate.

Print/Stop test

This diagnostic test can be used to isolate the cause of problems, such as image formation defects and jams, within the engine. This test allows you to stop the paper anywhere along the printer's paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 mS. If the timer is set to a value that is greater than it takes to print the job, there are two ways to recover the printer.

- After the print job completes, press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550) to return to the diagnostic menu before the timer times out.
- After the timer times out, press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550). You will have to cycle the door switch to restart the engine and return it to a normal state.

When the timer trips, the display shows the message **Printing stopped , Press ✔. To continue**. Pressing ✔ will print the previously selected job. If you do not want the previous job to print, press CANCEL JOB (HP Color LaserJet 5500) or STOP (HP Color LaserJet 5550) first, and press the ✔ button.

NOTE Do not attempt to execute a Print/Stop test while the printer is calibrating; a power cycle will be required. If you encounter a jam message during testing, cycle the door switch.

Test pages

Printing test pages helps you determine whether the printer engine and the formatter are functioning.

Engine test page

To verify that the printer engine is functioning, print an engine test page. Use a small pointed object to depress the test page switch located on the left side of the printer, as shown in Figure 7-27. Test page switch. The test page should have a series of horizontal lines. The test page can use only Tray 2 as the paper source, so ensure paper is loaded in Tray 2.

Figure 7-27. **Test page switch**

Formatter test page

To verify that the formatter is functioning, print a configuration page as follows:

1. Press ✔ (HP Color LaserJet 5500) or MENU (HP Color LaserJet 5550) to enter the **MENUS**.
2. Press ▼ to highlight **MENUS**.
3. Press ✔ to select **MENUS**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. Press ✔ to select **PRINT CONFIGURATION**.

Engine resets

This section contains information about cold reset, NVRAM initialization, hard disk initialization, calibration bypass, and calibrating the printer.

Cold reset

A cold reset unlocks menus that have been locked and resets variables in the control panel. However, it does not clear the values in the Service menu (such as the serial number and page counts).

To perform a cold reset

1. Turn the printer on.
2. As the printer performs its power-on sequence, press and hold ✔ until all three lights on the control panel are lit.
3. When **Select A Language** appears on the display, press ▲ until **COLD RESET** appears on the display.
4. Press ✔. The printer will perform a cold reset and then continue its power-on sequence.

NVRAM initialization

CAUTION Initializing NVRAM will reset the serial number, the event log, the page counts, the calibration settings, and the EIO card. Use the Service menu to restore the serial number and page counts. You will also need to reconfigure any computers that print to this printer to recognize the printer. Initialize NVRAM only when absolutely necessary. In most situations, use a Cold reset to reset printer variables but still retain the needed values in the Service menu.

Before initializing NVRAM, print a configuration page and a supplies status page to gather the following information:

- Total page count and color page count
- Transfer kit count
- Fuser kit count
- Serial number

To initialize NVRAM

1. Turn the printer on and watch the control panel display.
2. When the display begins showing the memory count, press and hold ▼ until all three lights on the control panel are lit.
3. Press ▲.
4. Press PAUSE/RESUME for the HP Color LaserJet 5500 or press STOP for the HP Color LaserJet 5550. The display should show **SKIP DISK LOAD**.
5. Press ▲ until **NVRAM INIT** is highlighted.
6. Press ✔. The printer will initialize NVRAM and then continue its power-on sequence.

NOTE An NVRAM INIT will not always correct all CPR problems. NVRAM INIT only erases calibration values from NVRAM in the formatters. If you have done a full calibration and still have CPR issues, you should clear the NVRAM in the DC Controller. Currently, there is no feature available in the control panel to reset calibration values for both formatter and DC Controller. To perform the reset, open the top cover and press the Engine Test button for a few seconds. When you close the cover, the control panel display will indicate that the printer is performing a calibration. The calibration values are being cleared from the Controller NVRAM. This procedure might also be required to recover CPR.

Hard disk initialization

A hard disk initialization will erase and reformat the printer's hard disk. Perform hard disk initialization only if an error code appears on the control panel indicating an EIO disk error. Always try initializing the hard disk before replacing it.

To initialize the hard disk

1. Turn the printer on.
2. When the Memory Count appears on the display, press and hold the MENU button.
3. When the LED's are all on and steady, release the MENU button.
4. Press and release the ⮌ button. You should now see **INITIALIZE DISKS** on the control panel.
5. Press and release the ✔ button.

Calibration bypass

During certain diagnostic procedures, you will need to bypass the automatic calibration that is performed whenever the printer is turned on.

To bypass calibration

1. Turn the printer on and watch the control panel display.
2. When the display begins showing the memory count, press and hold ▼ until all three lights on the control panel are lit.
3. Press ▲.
4. Press PAUSE/RESUME. The display should show **SKIP DISK LOAD**.
5. Press ▲ until **SKIP CALIBRATION** is highlighted.
6. Press ✔. The printer will skip calibration and then continue its power-on sequence.

Calibrate now (HP Color LaserJet 5500 models only)

Use the following procedure to calibrate the printer whenever you replace the DC controller, the ETB, the drum drive motors, the drum drive gears, or a laser/scanner.

1. Press ✔ to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press▼ to highlight **CALIBRATE NOW**.
7. Press ✔ to select **CALIBRATE NOW**.
8. Wait for the printer to calibrate.

Full calibrate now (HP Color LaserJet 5550 models)

Use the following procedure to calibrate the printer whenever you replace the DC controller, the ETB, the drum drive motors, the drum drive gears, or a laser/scanner. Full Calibrate Now includes the Quick Calibrate routines and adds Drum Phase Calibration and Color Plane Registration. Full Calibrate lasts for about 3 minutes and 15 seconds.

1. Press MENU to open the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **FULL CALIBRATE NOW**.
7. Press ✔ to select **FULL CALIBRATE NOW**. Wait for the printer to calibrate.

NOTE Full Calibration only clears the DC Controller values. It does not clear values in the formatter. To clear values in the formatter, open the top cover and press the Engine Test button (located at the side of the printer as shown in Figure 7-27) down for several seconds.

Quick calibrate now (HP Color LaserJet 5550 models)

Quick calibrate now is used for color tone calibration (D-Max and D-Half) and takes only a few seconds to run.

1. Press MENU to open the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **QUICK CALIBRATE NOW**.
7. Press ✔ to select **QUICK CALIBRATE NOW**. Wait for the printer to calibrate.

Service menu

This section includes information about service menu options.

Accessing the Service menu

The Service menu is PIN-protected for added security. Only authorized service people have access to the Service menu. When you select **SERVICE** from the list of menus, you are prompted to enter your 8-digit PIN number. The PIN for the HP Color LaserJet 5500 printer is 04550002 and the PIN for the HP Color LaserJet 5500 printer is 09555004.

1. Press ▲ or ▼ until the first digit of the PIN is displayed.
2. Press ✔ to save the digit. The display will replace the digit with an asterisk.
3. Repeat steps 1 and 2 until all eight digits are entered.
4. Press ✔ at any time to move to the previous digit.

Clear event log

This item allows you to clear the printer's internal event log.

Total page count

The page count stored in NVRAM and printed on the configuration page represents the number of pages that the formatter has formatted (not including engine test prints). If you install a new formatter when repairing a printer, use this menu item to reset the page count to the previous value. In this way, the page count reflects the number of pages printed by the engine rather than starting over for the new formatter. The page count is broken into two categories: total mono pages and total color pages.

Transfer kit count

This item allows you to reset the transfer unit count if the value is lost, such as when you replace the formatter. This value is initially set to zero at the factory. Enter a value up to 120,000. This value is automatically reset to zero when a customer installs a new transfer kit and sets **NEW TRANSFER KIT** to **YES** in the Resets menu.

Fuser kit count

This item allows you to reset the fuser count if the value is lost, such as when you replace the formatter. This value is initially set to zero at the factory. Enter a value up to 150,000. This value is automatically reset to zero when a customer installs a new transfer kit and sets **NEW FUSER KIT** to **YES** in the Resets menu.

Serial number

If you replace the formatter, use this item to reset the serial number of the printer.

Service ID

This item allows the date that the printer was first used to be shown through the control panel, eliminating the need for customers to keep paper receipts for proof of warranty. Because the printer does not have an internal clock, the service ID date's availability is dependent on the printer being connected to a source that can provide the date, such as the installer, the driver, or the embedded Web server. In cases where the printer is not connected to a date source, the service ID will not be available, and the control panel will display **000000**.

Restoring the Service ID

If you replace the formatter, the date is lost. Use this menu item to reset the date to the original date the printer was first used. The date format is YYDDD. Calculate the date as follows:

1. To calculate YY, subtract 1990 from the calendar year.
2. To calculate the DDD, use the following formula:

   30 * (calendar month — 1) + calendar day = DDD

Example for restoring the Service ID

Example using the Service ID 14262, the date conversion is as follows:

Example actual date = September 22, 2004 or (9–22–04)

1. 2004 – 1990 = 14

   YY = 14
2. 30 * (9–1) + 22 = DDD

   30 * (8) + 22 = DDD

   240 + 22 = DDD

   262 = DDD

Converting the Service ID to an actual date

You can use the printer Service ID number to determine whether the printer is still under warranty.

The Service ID is formatted as a five-digit number. The first two digits represent the year (YY), and the remaining three digits represent the date (DDD). Convert the Service ID into the installation date as follows:

Service ID = **14262**, where **14** = YY and **262** = DD

1. Add 1990 to YY to determine the actual year that the printer was installed.
2. Divide DDD by 30 and add 1 to the quotient if there is a remainder.
3. The remainder from step 2 is the day of the month. If there is **no** remainder, the day of the month = 30.

Example for converting the Service ID to a date

1. 1990 + 14 = 2004

2. 262 / 30 = 8 remainder 22

   8 + 1 = 9

   Month = 9 or September

   22 = day of the month

NOTE A 6-day grace period is built into the date system.

Cold reset paper

When you perform a cold reset, the paper size stored in NVRAM is reset to the default factory setting. If you replace a formatter board in a country/region such as Europe that uses A4 as the standard paper size, use this menu to reset the default paper size to A4. **LETTER** and **A4** are the only available values.

Diagrams

This section contains diagrams for printer part and assembly locations.

Main parts

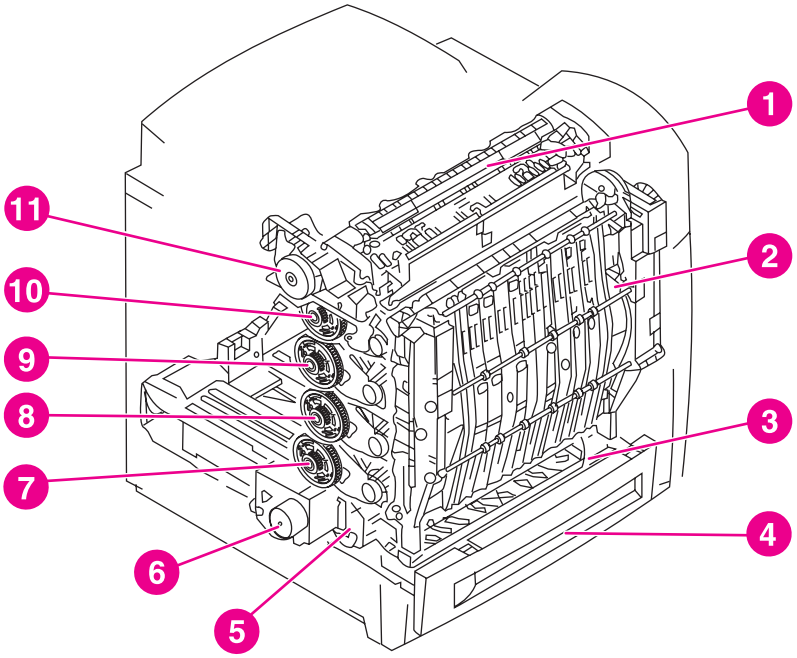


Figure 7-28. **Location of main parts**

1	Fuser assembly
2	ETB assembly
3	Paper pickup assembly
4	Cassette
5	Paper pickup drive assembly
6	Disengaging drive assembly
7	Drum drive assembly (cyan/magenta)
8	Drum drive assembly (yellow)
9	Drum drive assembly (cyan/magenta)
10	Drum drive assembly (black)
11	Fuser drive assembly

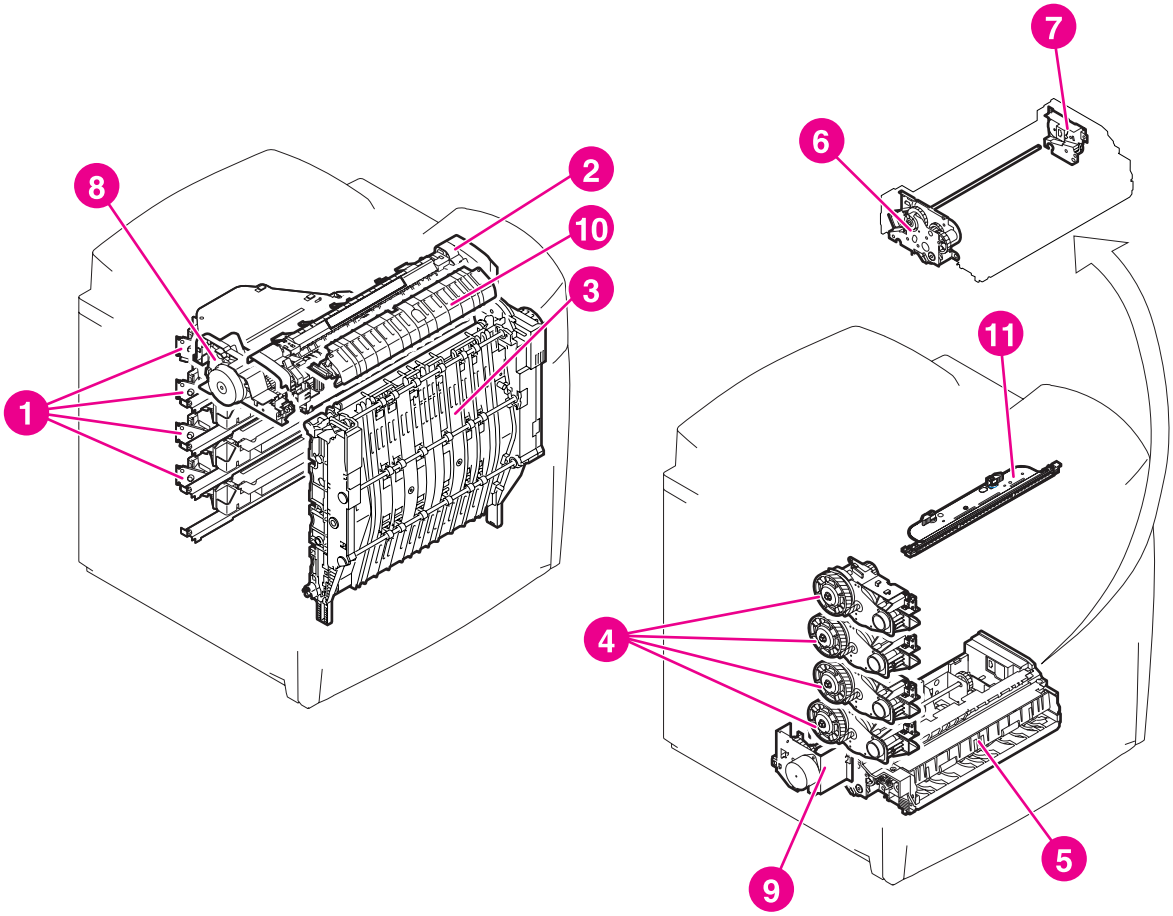


Figure 7-29. **Mechanical system main unit**

1	Laser/Scanner unit
2	Fuser unit
3	ETB unit
4	Drum drive unit (CMYK)
5	Pick-up unit
6	Pick-up drive unit
7	Lifter drive unit
8	Fixing drive unit
9	Developing disengaging drive unit
10	Color misregistration detection unit
11	Static eliminator unit (HP Color LaserJet 5550)

Switches

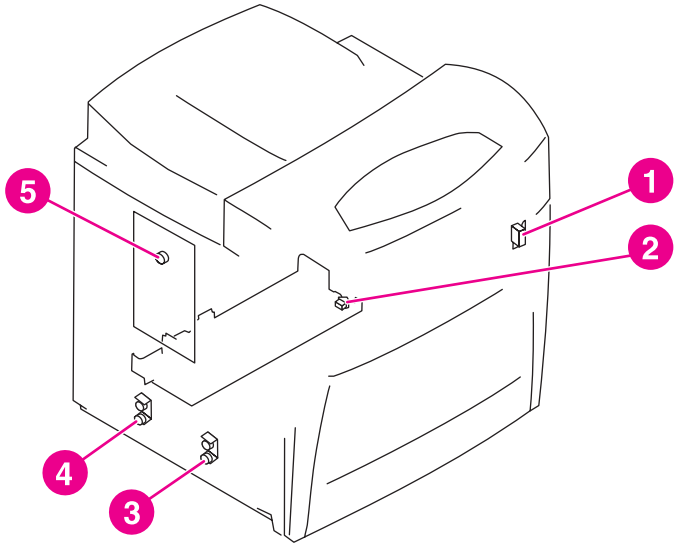


Figure 7-30. **Location of switches**

1 Door open detection switch, SW1
2 Power switch
3 Paper width detection switch, SW4, SW5, SW6
4 Paper length detection switch, SW1, SW2, SW3
5 Test print switch, SW101

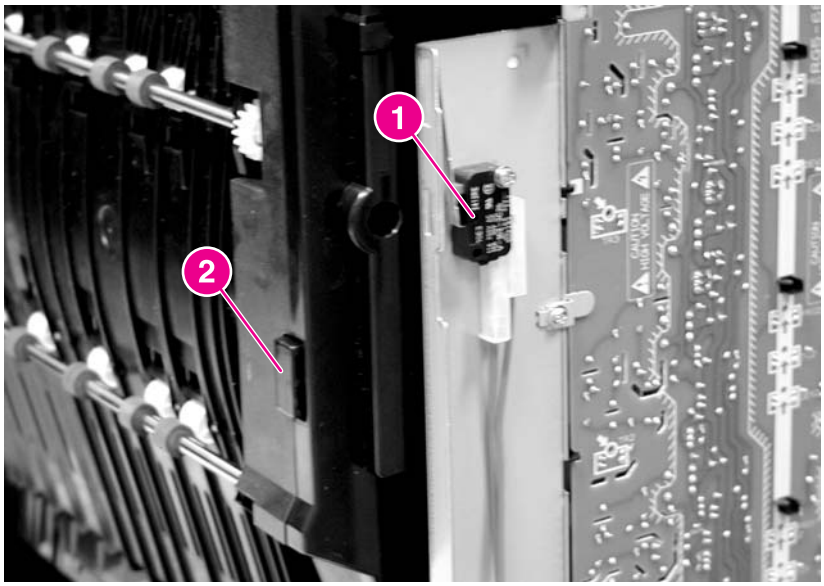


Figure 7-31. **Door switch**

1 Open door switch
2 Front cover switch

Solenoid and clutch

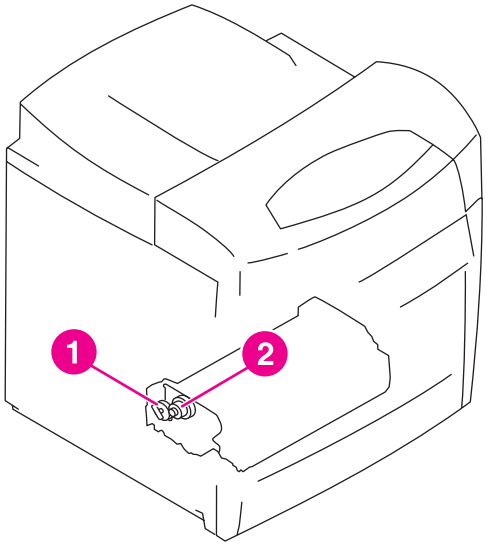


Figure 7-32. **Location of solenoid and clutch**

1 Multi-purpose tray pickup solenoid, SL1
2 Cassette pickup clutch, CL1

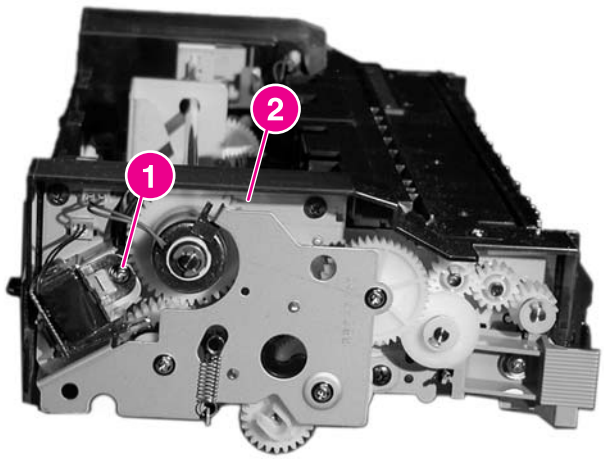


Figure 7-33. **Solenoid and clutch on the paper pickup unit**

Motors and fans

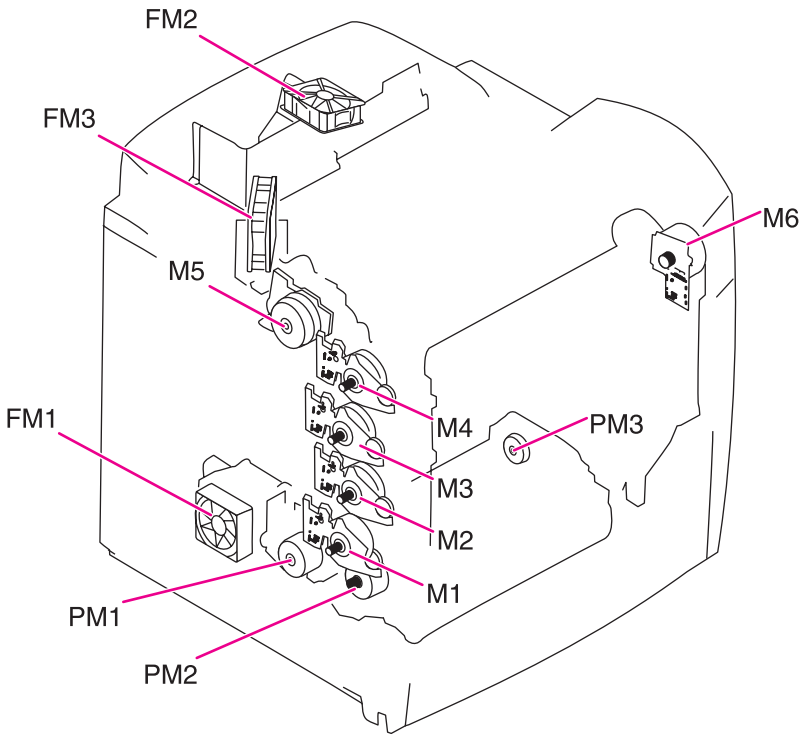


Figure 7-34. **Location of motors and fans**

Table 7-52. Motors and fans

Name	Function
M1	cyan drum motor
M2	yellow drum motor
M3	magenta drum motor
M4	black drum motor
M5	fuser motor
M6	ETB motor
PM1	developing disengaging motor
PM2	pickup motor
PM3	lifter motor
FM1	power supply fan
FM2	formatter fan
FM3	cartridge fan

PCBs

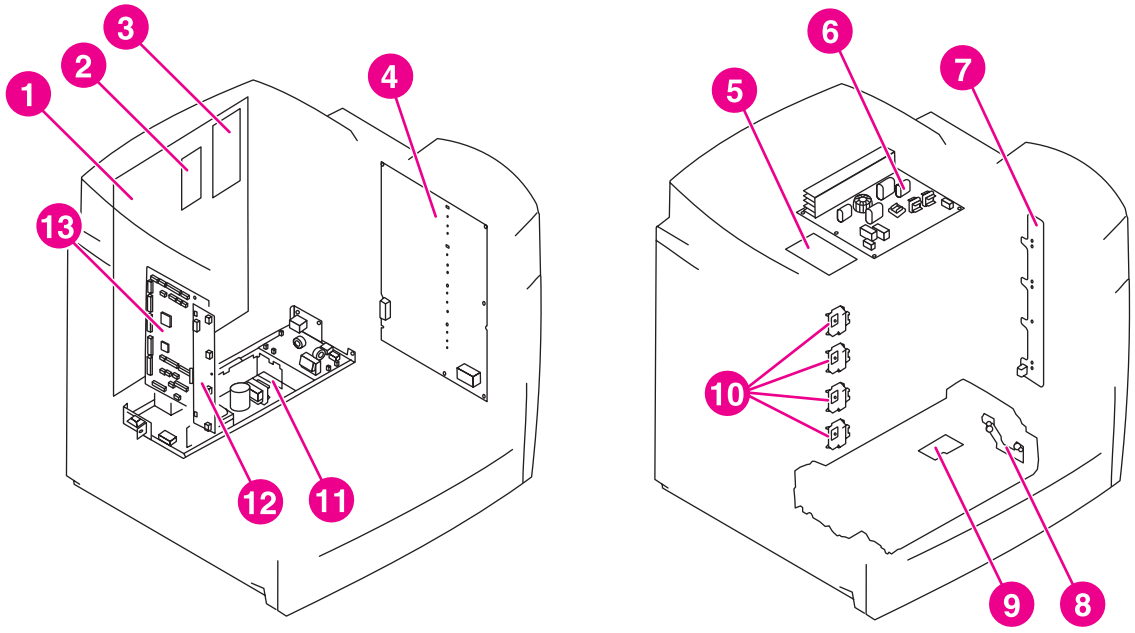


Figure 7-35. **PCB locations**

1 Formatter
2 Firmware
3 I/O daughter card
4 High-voltage power supply PCB
5 Discharging high-voltage PCB
6 Fuser power supply PCB
7 Toner level detection PCB
8 Multi-purpose tray sensor PCB
9 Cassette sensor PCB
10 Memory tag antenna PCBs
11 Low-voltage power supply
12 Memory controller PCB
13 DC controller PCB

DC controller PCB

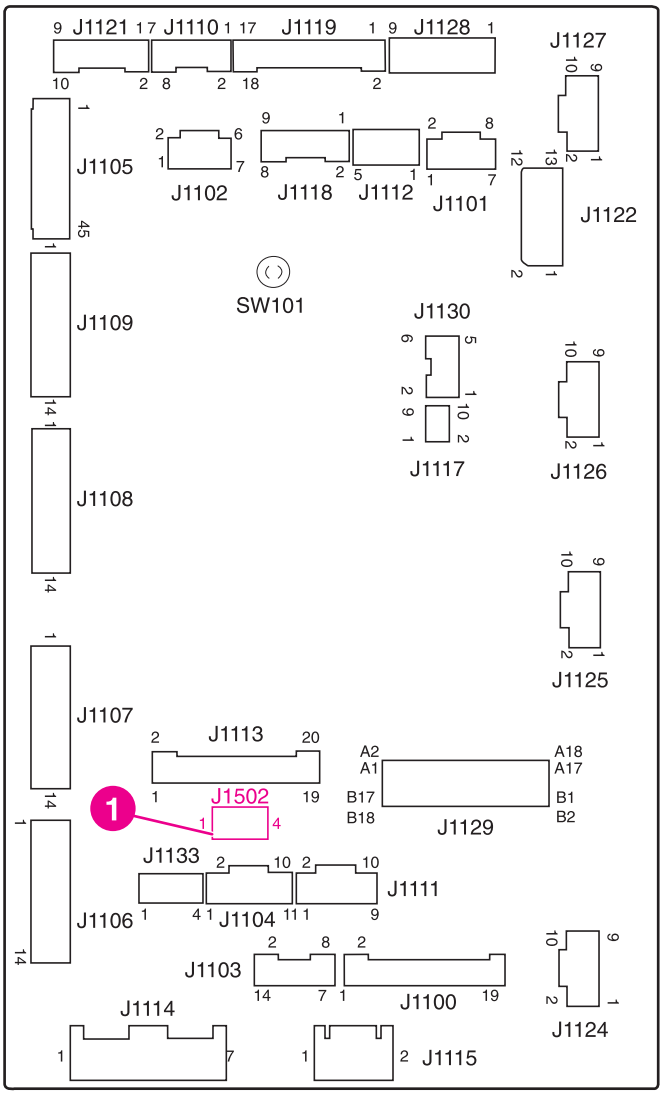


Figure 7-36. **Location of DC controller PCB components**

1 HP Color LaserJet 5550 only

Connectors

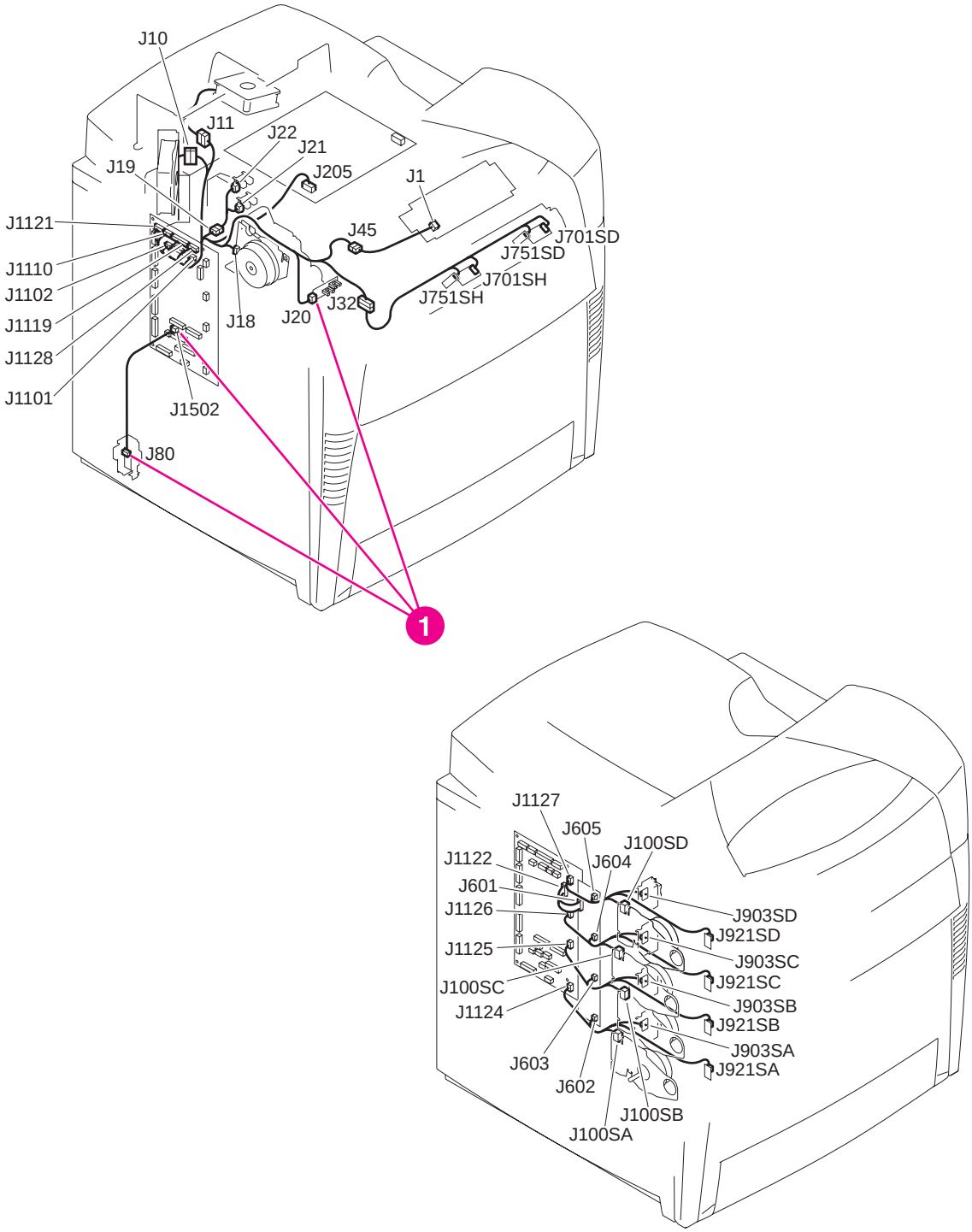


Figure 7-37. **Location of connectors (1 of 3)**

1 HP Color LaserJet 5550 only

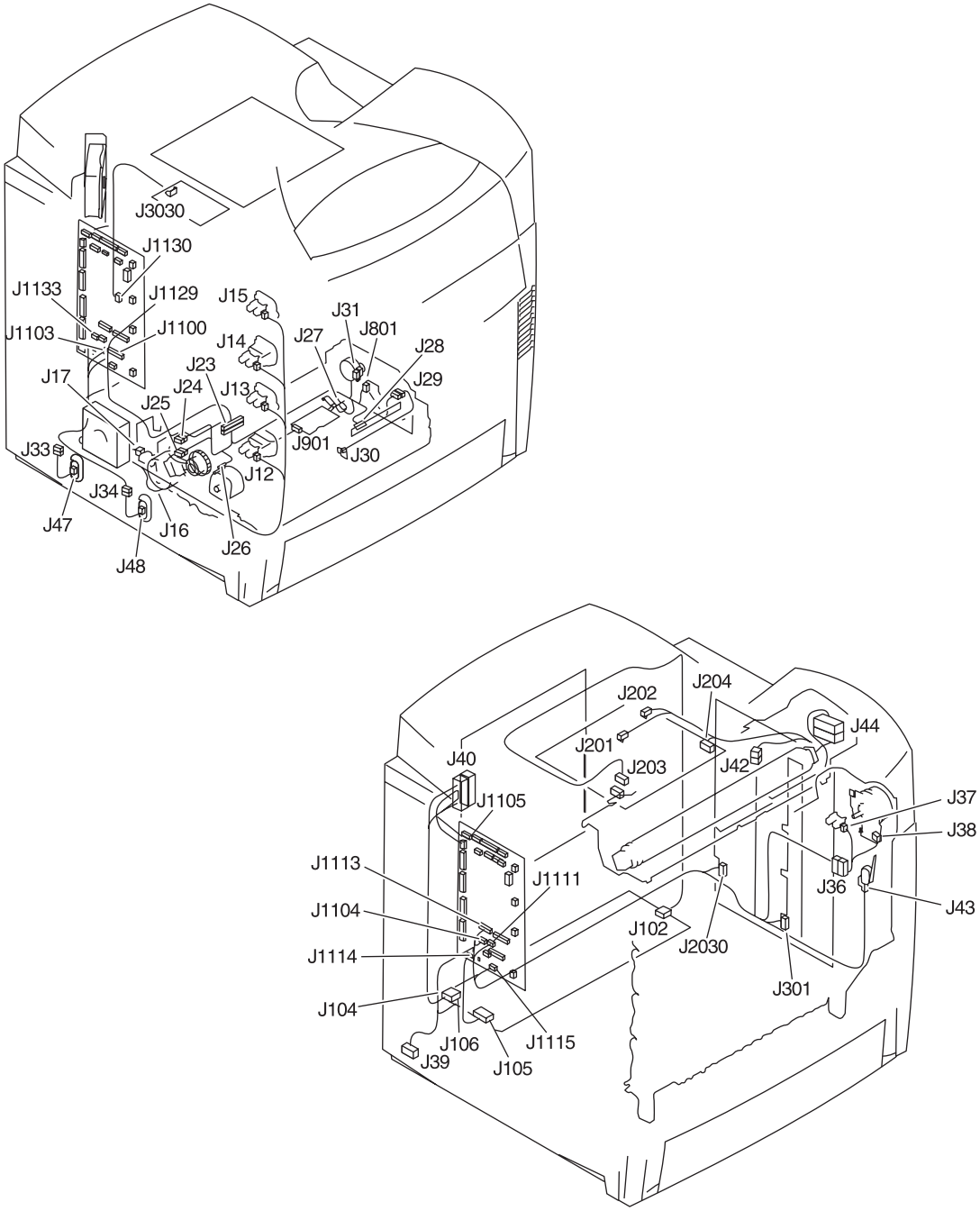


Figure 7-38. **Location of connectors (2 of 3)**

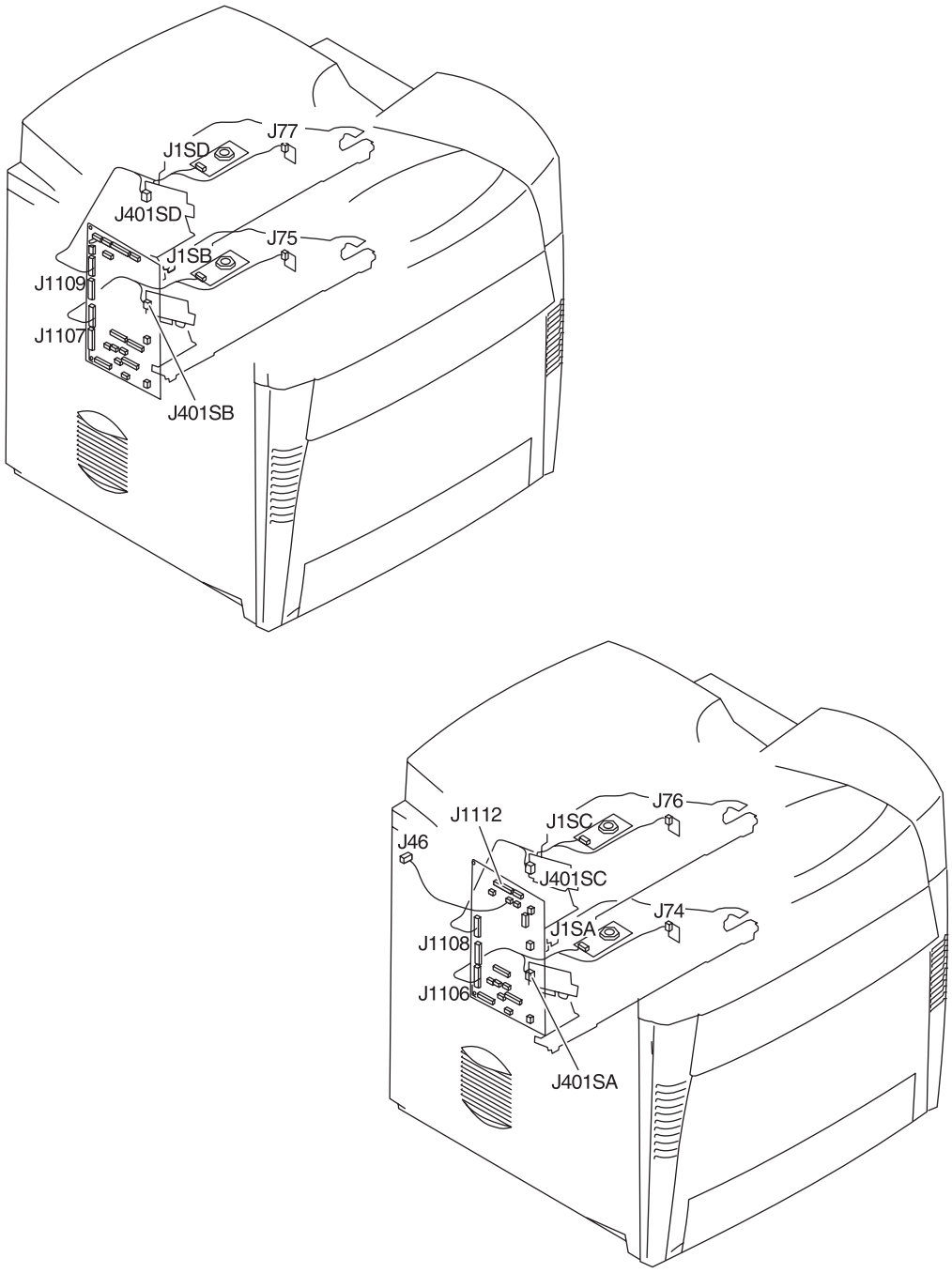


Figure 7-39. **Location of connectors (3 of 3)**

500-sheet paper feeder connectors

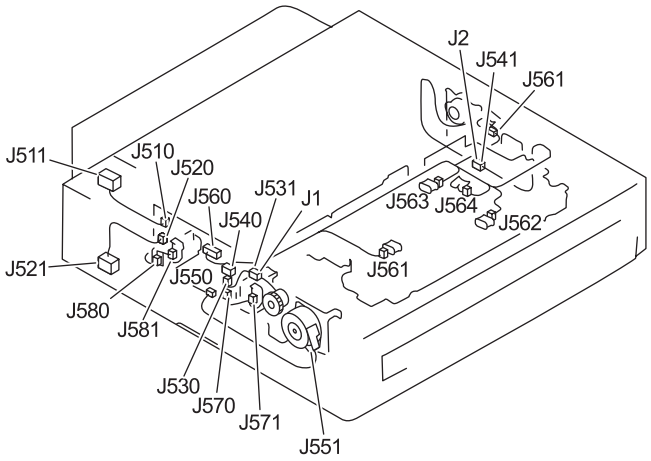


Figure 7-40. **500-sheet paper feeder connectors**

General circuit diagram

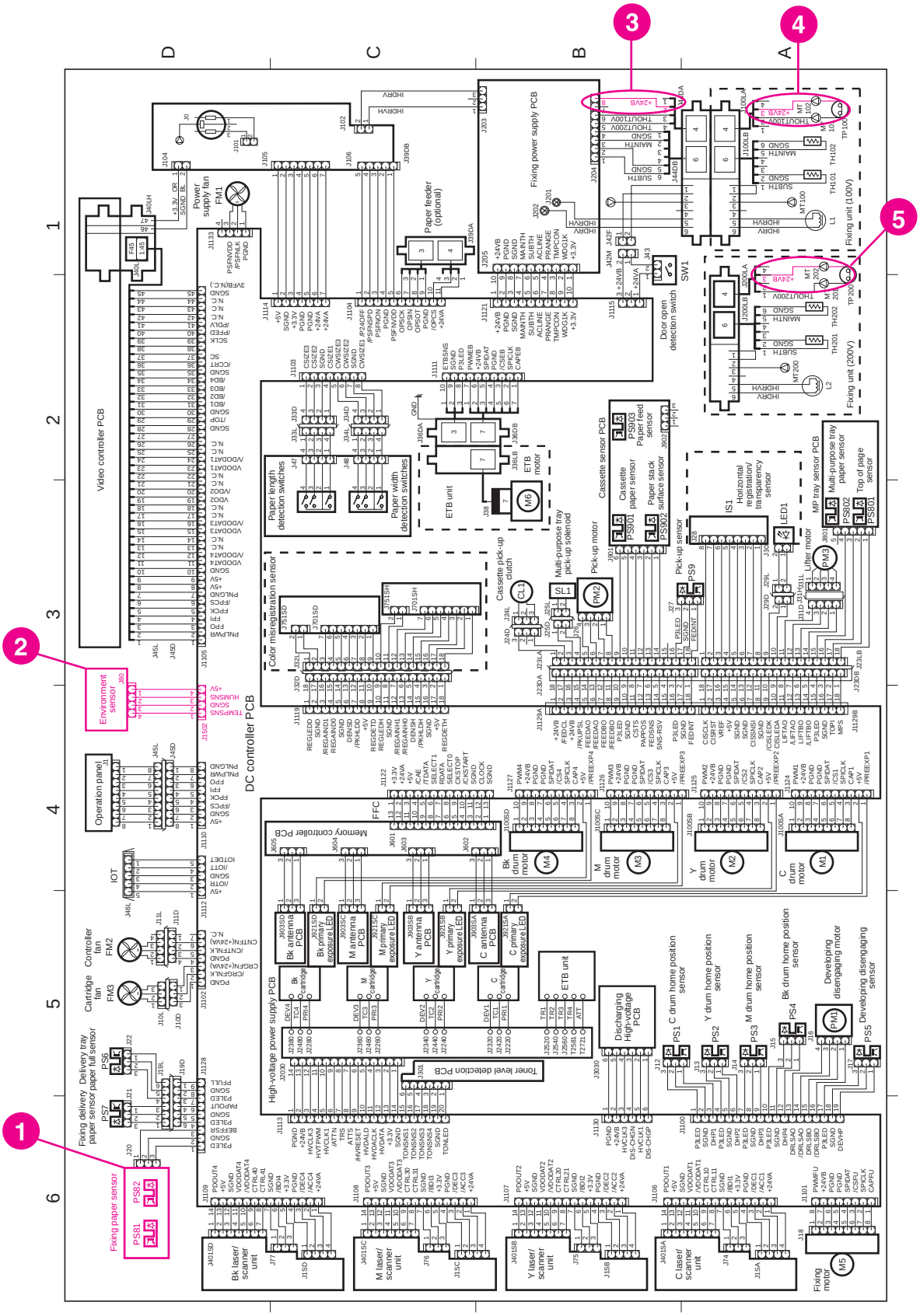


Figure 7-41. **General circuit diagram**

1-5 HP Color LaserJet 5550 only.

500-sheet paper feeder circuit diagram

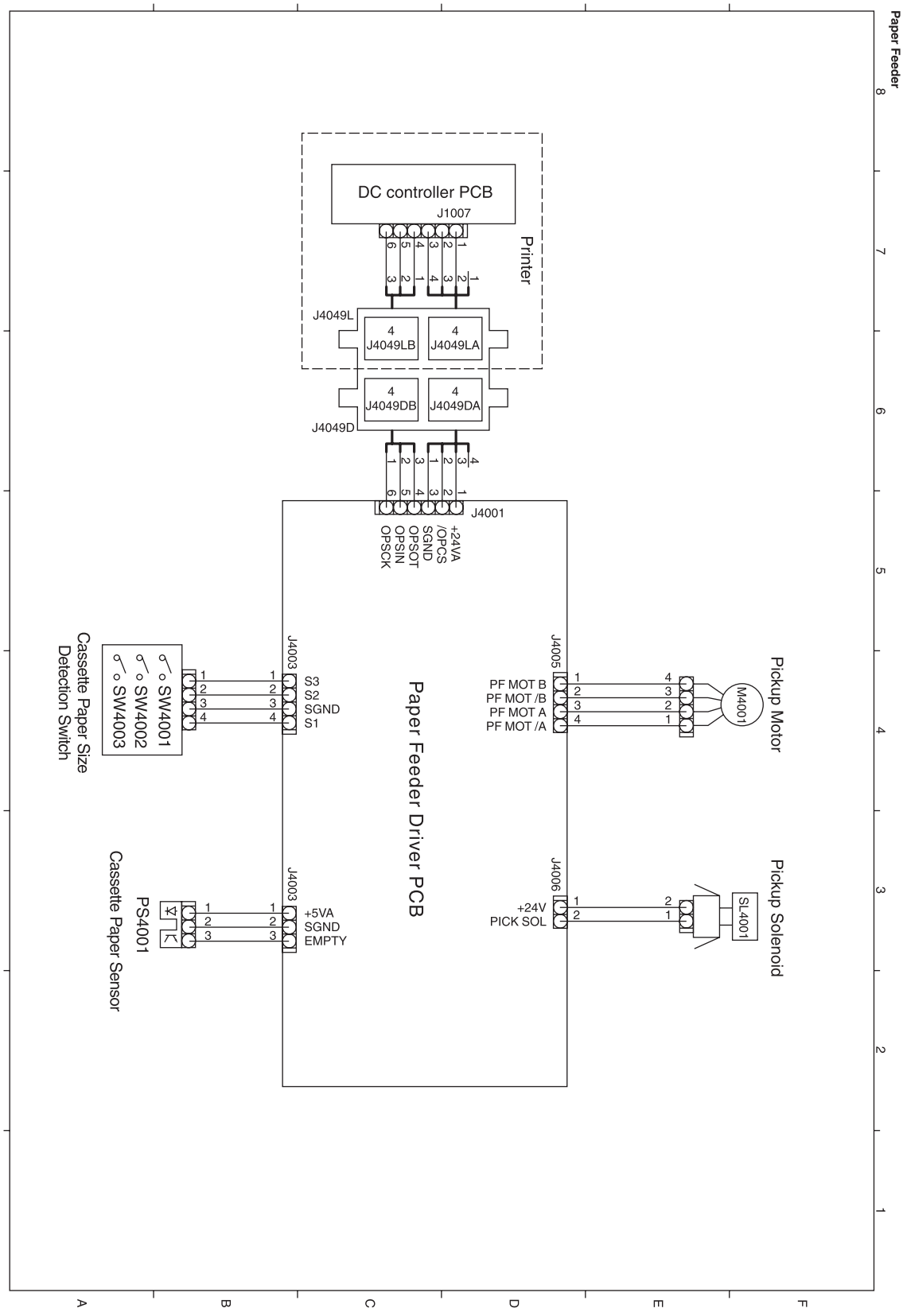


Figure 7-42. **500-sheet paper feeder circuit diagram**

8 Parts and diagrams

This chapter contains information for the following topics.

Introduction 462
Ordering parts 463
    Supplies and accessories 463
    Common fasteners 468
Illustrations and parts lists (printer) 470
Illustrations and parts lists (500-sheet paper feeder) 520

Introduction

The figures in this chapter show the major subassemblies in the printer and their component parts. A table (materials list) follows each exploded assembly diagram. Each table lists the reference designator (item number), the associated part number, and the description of each part.

NOTE When looking for a part number, pay careful attention to the voltage listed in the description column to ensure that the part number selected is for the correct printer model.

NOTE In this manual, the abbreviation "PCB" stands for "printed circuit board assembly." Components described as a PCB may consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

Ordering parts

All standard part numbers are stocked and can be ordered from Hewlett-Packard Customer Support-Americas (HPCS-A) or Hewlett-Packard Customer Support-Europe (HPCS-E). For information about contacting HPCS-A or HPCS-E, see Chapter 2.

NOTE Parts that have no reference designator or part number are not field replaceable and cannot be ordered.

Supplies and accessories

The items listed in Table 8-1. Supplies and accessories are available through your local authorized HP dealer. To find a dealer near you (or if your local dealer is temporarily out of stock), call the HP Customer Information Center at (800) 752-0900.

NOTE See Chapter 2 for documentation part numbers.

Supplies and accessories are available directly from Hewlett-Packard at the following numbers:

- U.S.: 800-538-8787
- Canada: 800-387-3154, (Toronto) 416-671-8383
- United Kingdom: 0734-441212

Contact your local HP Parts Coordinator for other local phone numbers.

Table 8-1. Supplies and accessories

Product name	Description	Product number	Part number	Exchange number
Accessories				
JetDirect 620N	5500 only	J7934A		
HP Jetdirect connectivity card	None	J6057A	J6057-69001	
FIR pod	5500 only	C4103A		
Printer stand	None	C9669B		
Optional 500-sheet paper feeder and Tray 3 assembly	None	C7130A	C7130-67901	
Cables				
IEEE-1284 compliant parallel cable, 3 m, with male (c-type) connector	None	C2946A		

Table 8-1. Supplies and accessories (continued)

Product name	Description	Product number	Part number	Exchange number
IEEE-1284 compliant parallel cable, 10 m, with male (c-type) connector	None	C2947A		
USB 2 m	None	C6518A		
USB 3 m	None	C6520A		
Macintosh DIN-8 printer cable	None	92215S		
HP LocalTalk cable kit	None	92215N		
Media				
HP Color LaserJet Transparencies (letter) 50 sheets	None	C2934A		
HP Color LaserJet Transparencies (A4) 50 sheets	None	C2936A		
HP LaserJet Monochrome transparencies (letter)	None	92296T		
HP LaserJet Monochrome transparences (A4)	None	92296U		
HP LaserJet Soft Gloss paper (letter) 200 sheets	None	C4179A		
HP LaserJet Soft Gloss paper (A4) 200 sheets	None	C4179B		
HP LaserJet Tough paper (letter)	None	Q1298A		
HP LaserJet Tough paper (A4)	None	Q1298B		
HP Premium Choice LaserJet paper (letter)	None	HPU1132		
HP Premium Choice LaserJet paper (A4)	None	CHP410		

Table 8-1. Supplies and accessories (continued)

Product name	Description	Product number	Part number	Exchange number
HP LaserJet paper (letter)	None	HPJ1124		
HP LaserJet paper (A4)	None	CHP310		
Memory				
Printer hard disk		J6073A	J6073-61003	
Compact Flash 32MB Firmware	5550 only		Q2635-67913	
4 MB Flash DIMM	5500 only (5550 NA)	C4287A	C4287A	
64 MB memory DIMM (SDRAM)	5500 only (5550 NA)	C7848A	C7848-67901	
128 MB memory DIMM (SDRAM)	5500 only	C7850A	C7850-67901	
128 MB memory DIMM (SDRAM)	5550 only	Q2630A	Q2630-67951	
256 MB memory DIMM (SDRAM)	5500 only	C9653A	C9653-67901	
256 MB memory DIMM (SDRAM)	5550 only	Q2631A	Q2631-67951	
Control panel overlays				
Assy CP Label ES/PT	5550 only		Q3713-60105	
Assy CP Label DE/FR/IT	5550 only		Q3713-60107	
Assy CP Label CS/HU/PL	5550 only		Q3713-60108	
Assy CP Label NO/SV/FI	5550 only		Q3713-60109	
Assy CP Label RU/EL	5550 only		Q3713-60110	
ASSY CP Label ES/PT/IT/FR/NL/DE	None		Q3713-60111	
English overlay	5500 only		C9656-40002	
English overlay	5550 only		Q3713-00024	
French overlay	5500 only		C9656-40003	
French overlay	5550 only		Q3713-00002	
German overlay	5500 only		C9656-40004	

Table 8-1. Supplies and accessories (continued)

Product name	Description	Product number	Part number	Exchange number
German overlay	5550 only		Q3713-00003	
Italian overlay	5500 only		C9656-40005	
Italian overlay	5550 only		Q3713-00004	
Spanish overlay	5500 only		C9656-40006	
Spanish overlay	5550 only		Q3713-00005	
Danish overlay	5500 only		C9656-40007	
Danish overlay	5550 only		Q3713-00006	
Dutch overlay	5500 only		C9656-40008	
Dutch overlay	5550 only		Q3713-00007	
Finnish overlay	5500 only		C9656-40009	
Finnish overlay	5550 only		Q3713-00008	
Norwegian overlay	5500 only		C9656-40010	
Norwegian overlay	5550 only		Q3713-00009	
Portuguese overlay	5500 only		C9656-40011	
Portuguese overlay	5550 only		Q3713-00001	
Swedish overlay	5500 only		C9656-40012	
Swedish overlay	5550 only		Q3713-00010	
Czech overlay	5500 only		C9656-40013	
Czech overlay	5550 only		Q3713-00011	
Hungarian overlay	5500 only		C9656-40014	
Hungarian overlay	5550 only		Q3713-00012	
Polish overlay	5500 only		C9656-40015	
Polish overlay	5550 only		Q3713-00013	
Russian overlay	5500 only		C9656-40016	
Russian overlay	5550 only		Q3713-00014	
Turkish overlay	5500 only		C9656-40017	
Turkish overlay	5550 only		Q3713-00015	
Arabic overlay	5500 only		C9656-40018	
Arabic overlay	5550 only		Q3713-00016	
Greek overlay	5500 only		C9656-40019	

Table 8-1. Supplies and accessories (continued)

Product name	Description	Product number	Part number	Exchange number
Greek overlay	5550 only		Q3713-00017	
Hebrew overlay	5500 only		C9656-40020	
Hebrew overlay	5550 only		Q3713-00018	
Japanese overlay	5500 only		C9656-40021	
Japanese overlay	5550 only		Q3713-00019	
Korean overlay	5500 only		C9656-40022	
Korean overlay	5550 only		Q3713-00020	
Thai overlay	5500 only		C9656-40023	
Thai overlay	5550 only		Q3713-00023	
Simplified Chinese overlay	5500 only		C9656-40024	
Simplified Chinese overlay	5550 only		Q3713-00021	
Traditional Chinese overlay	5500 only		C9656-40025	
Traditional Chinese overlay	5550 only		Q3713-00022	
Reference materials				
HP LaserJet Printer Family Paper Specifications Guide	5500 only		5963-7863	
HP LaserJet Printer Family Paper Specifications Guide	5500 only		5851-1468	
PCL/PJL Technical Reference Package	5500 only		5021-0377	
Supplies				
Black print cartridge		C9730A	C9730-67901	
Black print cartridge (Europe)	5500 only		C9730-67902	
Cyan print cartridge		C9731A	C9731-67901	
Cyan print cartridge (Europe)	5500 only		C9731-67902	

Table 8-1. Supplies and accessories (continued)

Product name	Description	Product number	Part number	Exchange number
Yellow print cartridge		C9732A	C9732-67901	
Yellow print cartridge (Europe)	5500 only		C9732-67902	
Magenta print cartridge		C9733A	C9733-67901	
Magenta print cartridge (Europe)	5500 only		C9733-67902	
Image Transfer Kit (ETB)		C9734B	RG5-7737-000CN (new)	C9734-69001 (exchange)
Image fuser kit (110 volt)	5500 only	C9735A	RG5-6848-150CN (new)	C9656-69012 (exchange)
Image fuser kit (110 volt)	5550 only	Q3984A	Q3984-67901 (new)	Q3984-69001 (exchange)
Image fuser kit (220 volt)[1]	5500 only	C9736A	RG5-6701-000CN (new)	C9656-69002 (exchange)
Image fuser kit (220 volt)	5550 only	Q3985A	Q3985-67901 (new)	Q3985-69001 (exchange)

[1]The only difference between the print cartridges listed above is that the Europe-only print cartridges have different languages on the instruction sheet inside the box.

Common fasteners

Table 8-2. Common fasteners

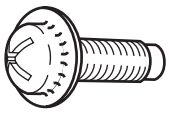
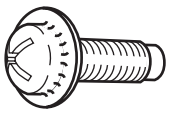
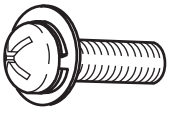
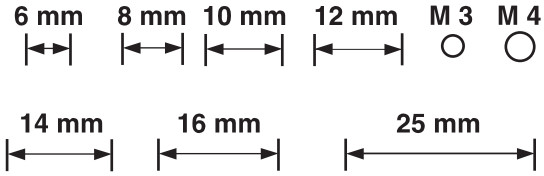
Illustration	Description	Uses
	Screw, truss head M3x8 part number XA9-1330-000CN	To hold sheet metal to sheet metal.
	Screw, self tapping	To hold plastic to plastic.
	Screw, truss head M3x6 part number XA9-1329-000CN	To hold sheet metal to sheet metal. example: formatter cage
	Screw, machine with washer M3x10 part number XA9-1162-000CN	To hold plastic to metal. example: printer covers

Table 8-2. Common fasteners (continued)

Illustration	Description	Uses
	Retaining ring (e-type)	To hold a bolt through a slot or a gear in place.



Illustrations and parts lists (printer)

The following illustrations and parts tables list the field replaceable units (FRU) for this printer. At the end of this chapter are two tables listing all of the parts shown in this chapter. See tables 8-28 and 8-29. Both tables list the appropriate figures in this chapter where the part can be found.

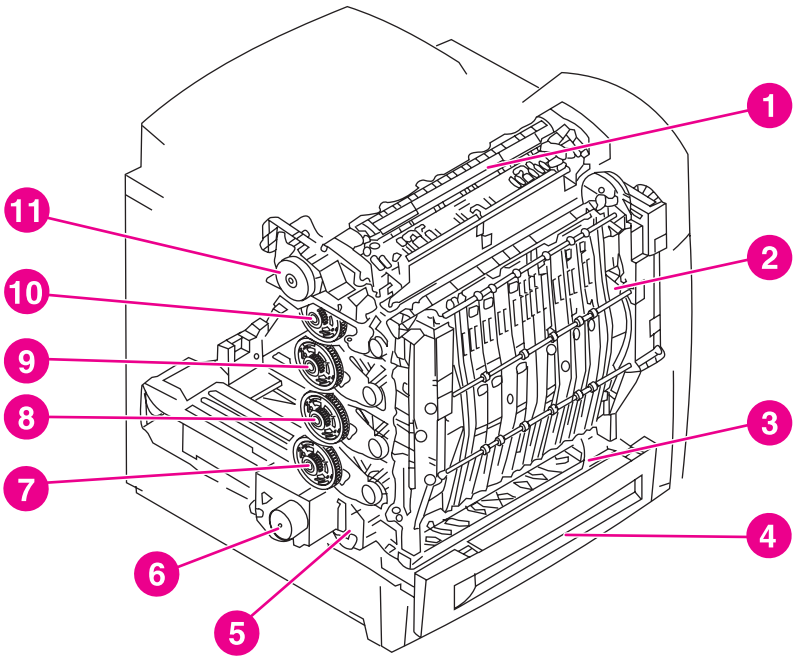


Figure 8-1. **Assembly location diagram**

1 Fuser assembly, see Figure 8-24. Fuser assembly (1 of 2).
2 ETB assembly, see Figure 8-22. ETB assembly (1 of 2).
3 Paper pickup assembly, see Figure 8-20. Paper pickup assembly (1 of 2).
4 Cassette, see Figure 8-18. Cassette (1 of 2).
5 Paper pickup drive assembly, see Figure 8-14. Paper pickup drive assembly.
6 Disengaging drive assembly, see Figure 8-16. Disengaging drive assembly.
7 Drum drive assembly (cyan/magenta), see Figure 8-15. Drum drive assembly.
8 Drum drive assembly (yellow), see Figure 8-15. Drum drive assembly.
9 Drum drive assembly (cyan/magenta), see Figure 8-15. Drum drive assembly.
10 Drum drive assembly (black), see Figure 8-15. Drum drive assembly.
11 Fuser drive assembly, see Figure 8-17. Fuser drive assembly.

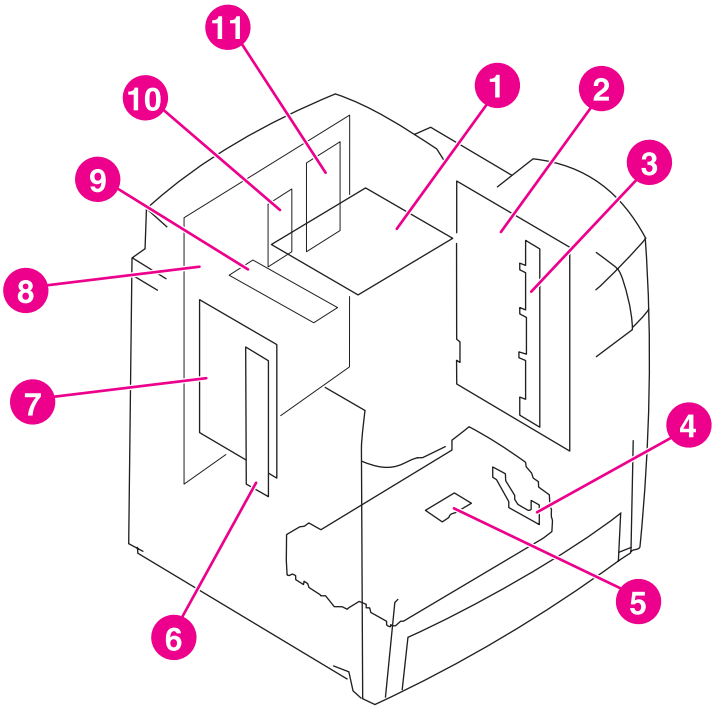


Figure 8-2. **PCB locations**

Table 8-3. PCB locations

Ref	Description	Part number	Qty
1	Fuser power supply PCB	RG5-6801-000CN (100 - 127 volt), RG5-6802-000CN (220 - 240 volt)	1
2	High-voltage power supply PCB	RG5-6800-000CN	1
3	toner sensor PCB	RG5-6805-000CN	1
4	multi-purpose tray sensor PCB	RG5-6806-000CN	1
5	cassette sensor PCB	RG5-6807-000CN	1
6	E-label memory controller PCB	RG5-6803-000CN	1
7	DC controller PCB, 5550 only	RG5-7684-000CN	1
7	DC controller PCB, 5500 only	RG5-6850-070CN	1
8	Formatter (simplex), 5500 only	C9660-69011 (exchange), C9660-67911 (new)	1
8	Formatter (duplex), 5500 only	C9661-69002 (exchange), C9661-67902 (new)	1
8	Formatter assembly, 5550 only, simplex/duplex	Q3713-69001 (exchange), Q3713-67902 (new)	1
9	static discharge PCB	RG5-6810-000CN	1
10	Firmware DIMM, 5500 only	C9156-67910	1
11	I/O daughter card, 5500 only	C9144-60001	1

NOTE The formatter is available with either simplex or duplex capability. Be sure to use the correct formatter for the model of printer you are servicing. The HP Color LaserJet 5550 and 5550n printers do not have duplex capability.

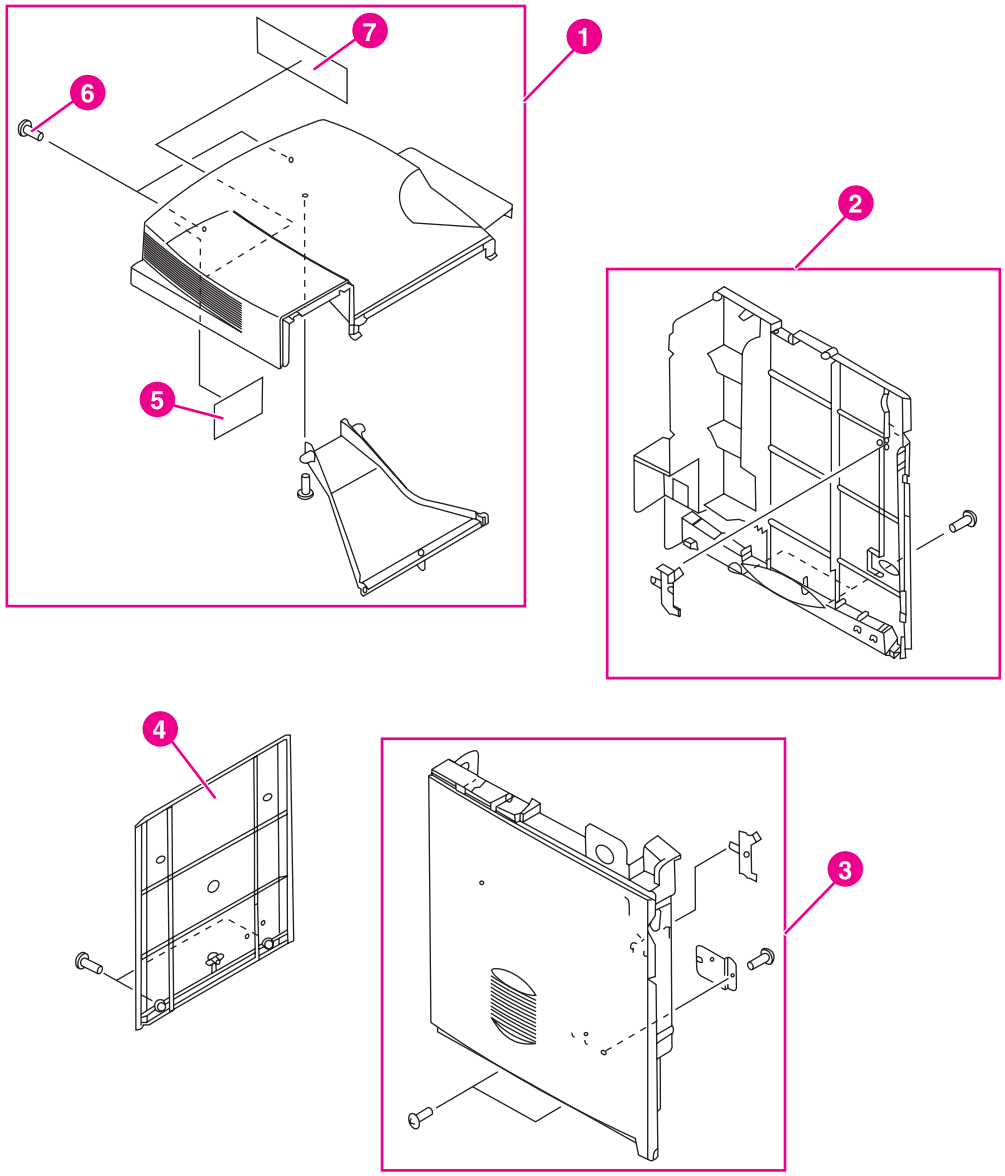


Figure 8-3. **External covers and panels (1 of 2)**

Table 8-4. External covers and panels (1 of 2)

Ref	Description	Part number	Qty
1	Rear top cover assembly, 5550 only	RG5-7732-000CN	1
1	Rear top cover assembly, 5500 only	RG5-6779-000CN	1
2	Right cover assembly	RG5-6783-020CN	1
3	Left cover assembly	RG5-6782-000CN	1
4	Rear cover	RG5-9485-000CN	1
5	Filter, rear	RB2-9379-000CN	1
6	screw, M3x8	XA9-1330-000CN	8
7	Filter, left side	RB2-9378-000CN	1

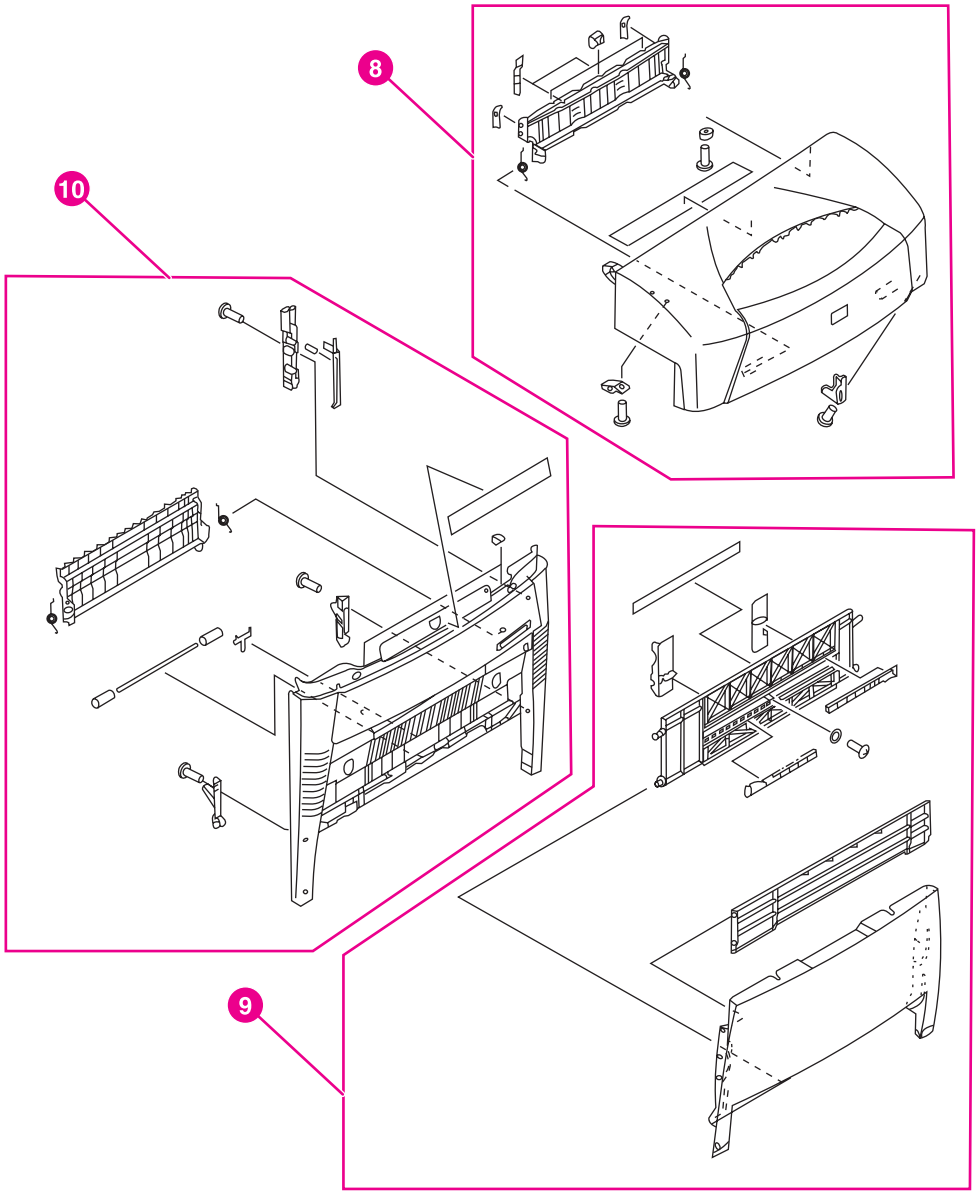


Figure 8-4. **External covers and panels (2 of 2)**

Table 8-5. External covers and panels (2 of 2)

Ref	Description	Part number	Qty
8	Top cover assembly	RG5-6778-060CN	1
9	Multi-purpose tray assembly	RG5-6780-070CN	1
10	Front cover assembly	RG5-6777-120CN	1

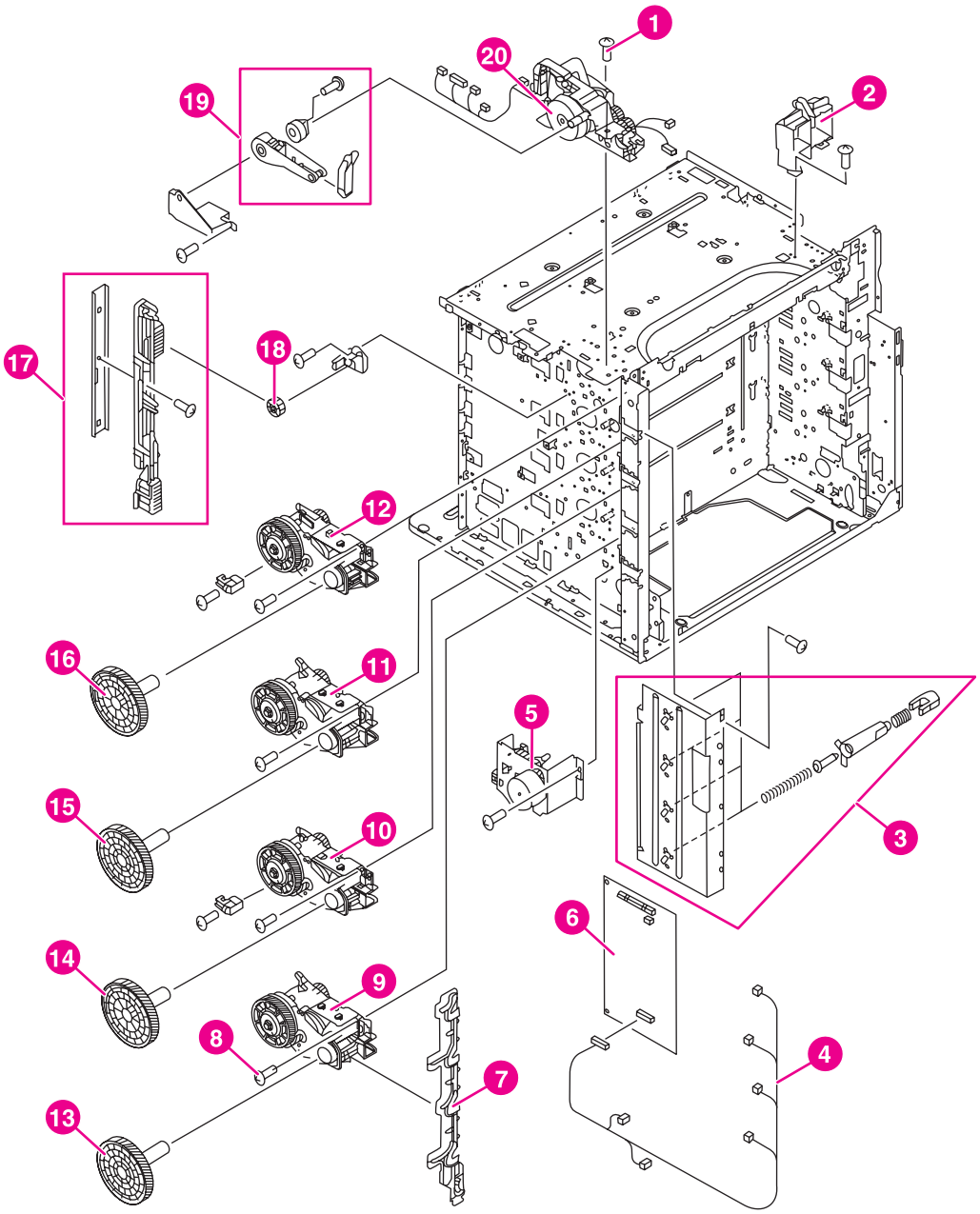


Figure 8-5. **Internal components (1 of 9)**

Table 8-6. Internal components (1 of 9)

Ref	Description	Part number	Qty
1	screw, M3x6, TP	XA9-1329-000CN	7
2	support, right hinge	RB2-9475-000CN	1
3	drum grounding assembly	RG5-6720-030CN	1
4	cable, left side	RG5-6818-000CN	1
5	disengaging drive assembly	RG5-6719-000CN	1
6	DC controller PCB, 5550 only	RG5-7684-000CN	1
6	DC controller PCB, 5500 only	RG5-6850-070CN	1
7	plate, drive release	RB2-9359-000CN	1
8	screw, M3x10, with washer	XA9-1162-000CN	13
9	drum drive assembly, cyan/magenta	RG5-7723-000CN	2
10	drum drive assembly, yellow	RG5-7724-000CN	1
11	drum drive assembly, cyan/magenta	RG5-7723-000CN	2
12	drum drive assembly, black	RG5-7725-000CN	1
13	gear, 200T	RS7-0320-000CN	2
14	gear, 200T	RS7-0321-000CN	2
15	gear, 200T	RS7-0320-000CN	2
16	gear, 200T	RS7-0321-000CN	2
17	disengaging plate assembly	RG5-6742-000CN	1
18	gear, 17T	RS7-0323-000CN	1
19	damper assembly	RG5-6786-000CN	1
20	fuser drive assembly, 5550 only	RG5-7700-000CN	1
20	fuser drive assembly, 5500 only	RG5-6714-000CN	1

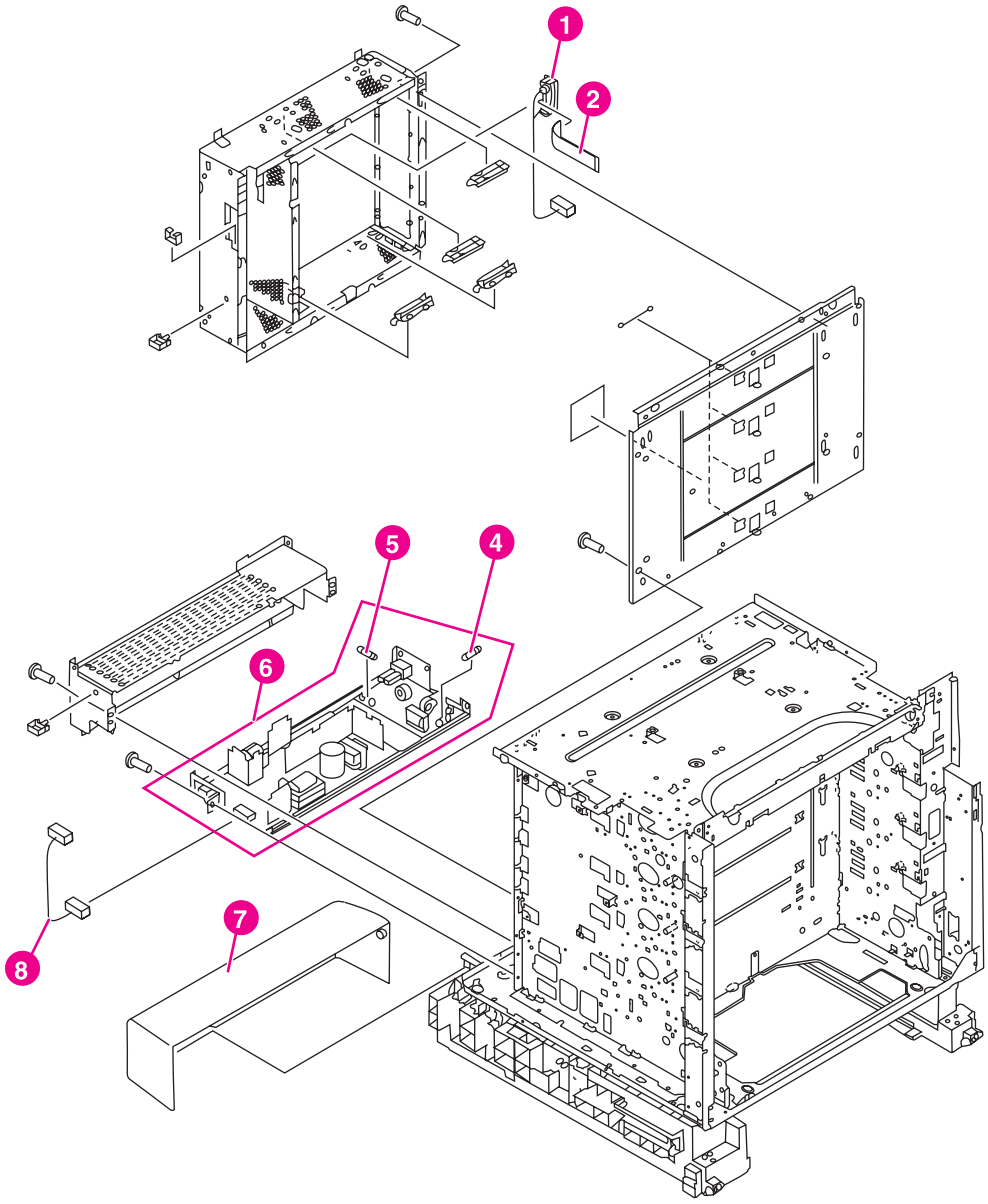


Figure 8-6. **Internal components (2 of 9)**

Table 8-7. Internal components (2 of 9)

Ref	Description	Part number	Qty
1	cable, formatter interface	RG5-6834-000CN	1
2	cable, flat	RH2-5510-000CN	1
3	spring, scanner support	RB2-8246-000CN	3
4	fuse, 250 v, 8 amp (110 and 220 v)	VD7-0648-001CN	1
5	fuse, 250 v, 20 amp (100 - 127 v) fuse, 250 v, 4 amp (220 - 240 v)	VD7-1732-002CN, VD7-0644-001CN	1
6	power supply assembly (100 - 127 v) power supply assembly (220 - 240 v)	RG5-6808-060CN, RG5-6809-060CN	1
7	cover, cassette rear	RB2-9478-020CN	1
8	cable, DC	RG5-6816-000CN	1

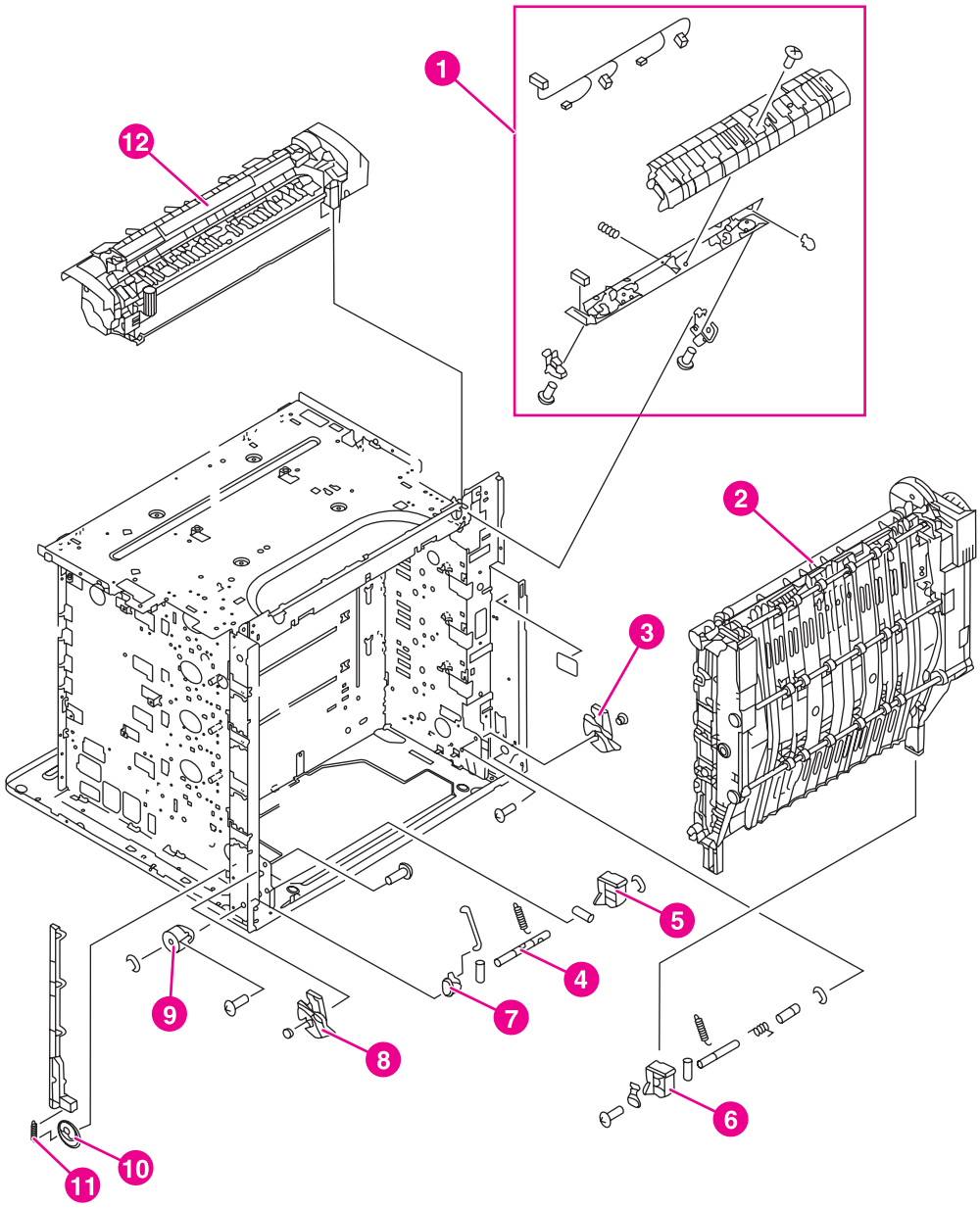


Figure 8-7. **Internal components (3 of 9)**

Table 8-8. Internal components (3 of 9)

Ref	Description	Part number	Qty
1	color registration detection unit	RG5-6688-000CN	1
2	ETB assembly	RG5-7737-000CN	1
3	gear, pressure, right	RB2-9151-000CN	1
4	spring, tension	RS6-2626-000CN	2
5	support, left, ETB	RB2-9147-000CN	1
6	support, right, ETB	RB2-9146-000CN	1
7	lever, interlock	RB2-9358-020CN	1
8	gear, pressure, left	RB2-9150-000CN	1
9	hinge, one-way	RB2-9152-000CN	1
10	cam/gear, 66T	RS7-0302-000CN	1
11	spring, tension	RS6-2632-000CN	1
12	fuser (100 - 127 v), 5500 only fuser (220 - 240 v), 5500 only	C9656-69012 (exchange), C9656-69002 (exchange)	1
12	fuser (100 - 127 v), 5550 only fuser (220 - 240 v), 5550 only	Q3984-69001 (exchange), Q3985-69001 (exchange)	1

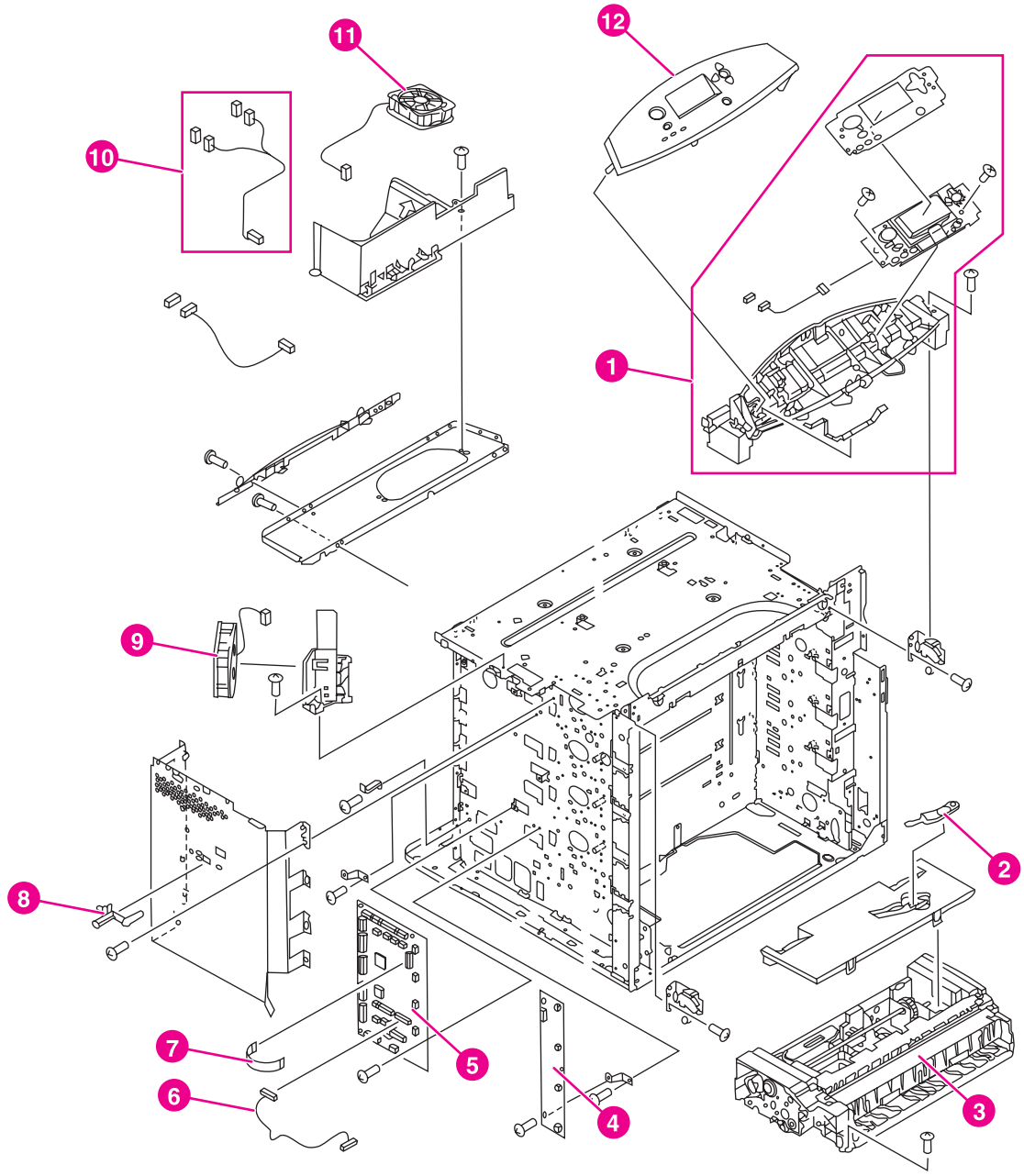


Figure 8-8. **Internal components (4 of 9)**

Table 8-9. Internal components (4 of 9)

Ref	Description	Part number	Qty
1	control panel assembly (100 - 127 v) control panel assembly (220 - 240 v) 5500 only	RG5-6781-030CN, RG5-6794-000CN	1
1	control panel assembly (100 - 127 v) control panel assembly (220 - 240 v), 5550 only	RG5-6781-030CN, RG5-6781-030CN	1
2	brush, cleaning	RB2-9145-000CN	1
3	paper pickup assembly, 5550 only	RG5-7709-000CN	1
3	paper pickup assembly, 5500 only	RG5-6670-110CN	1
4	E-label memory controller PCB	RG5-6803-000CN	1
5	DC controller PCB, 5550 only	RG5-7684-000CN	1
5	DC controller PCB, 5500 only	RG5-6850-070CN	1
6	cable, pickup unit	RG5-6829-000CN	1
7	cable, flat	RH2-5511-000CN	1
8	lever, test print	RB2-9350-000CN	1
9	fan, cartridge	RH7-1526-000CN	1
10	cable, fan	RG5-6820-000CN	1
11	fan, formatter	RH7-1491-000CN	1
12	control panel overlay, 5500 only	See Table 8-1. Supplies and accessories	1
12	control panel overlay, 5550 only	See Table 8-1. Supplies and accessories	1

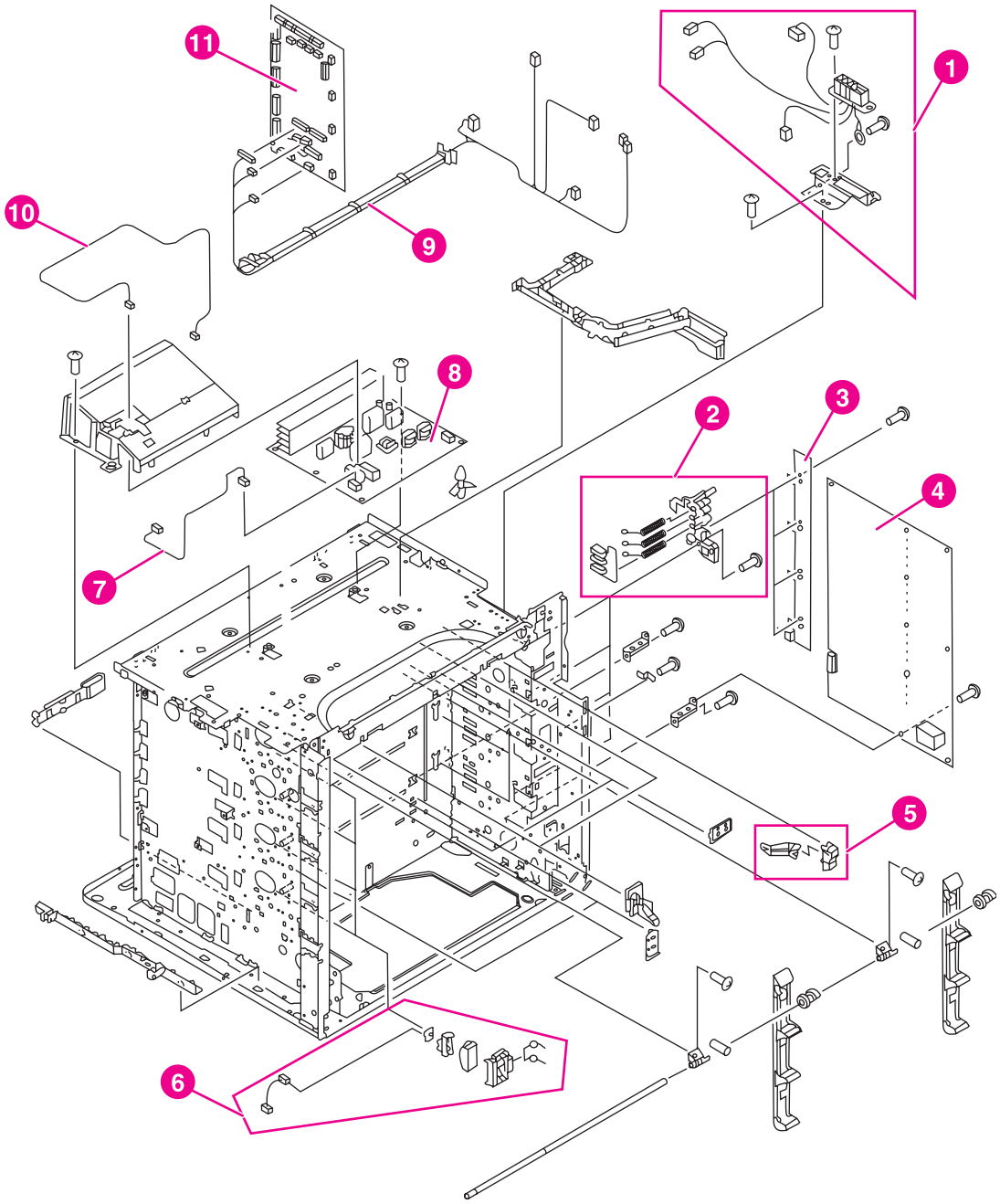


Figure 8-9. **Internal components (5 of 9)**

Table 8-10. Internal components (5 of 9)

Ref	Description	Part number	Qty
1	fuser connector mount assembly, 5550 only	RG5-7727-000CN	1
1	fuser connector mount assembly, 5500 only	RG5-6734-000CN	1
2	HVT terminal assembly	RG5-6725-000CN	4
3	toner sensor PCB	RG5-6805-000CN	1
4	high-voltage PCB	RG5-6800-000CN	1
5	lever	RF5-3898-000CN	4
6	e-label antenna assembly	RG5-6728-000CN	4
7	cable, fuser power supply	RG5-6827-000CN	1
8	fuser power supply (100 - 127 v) fuser power supply (220 - 240 v)	RG5-6801-000CN, RG5-6802-000CN	1
9	cable, intermediate	RG5-6826-000CN	1
10	cable, AC	RG5-6815-000CN	1
11	DC controller PCB, 5550 only	RG5-7684-000CN	1
11	DC controller PCB, 5500 only	RG5-6850-070CN	1

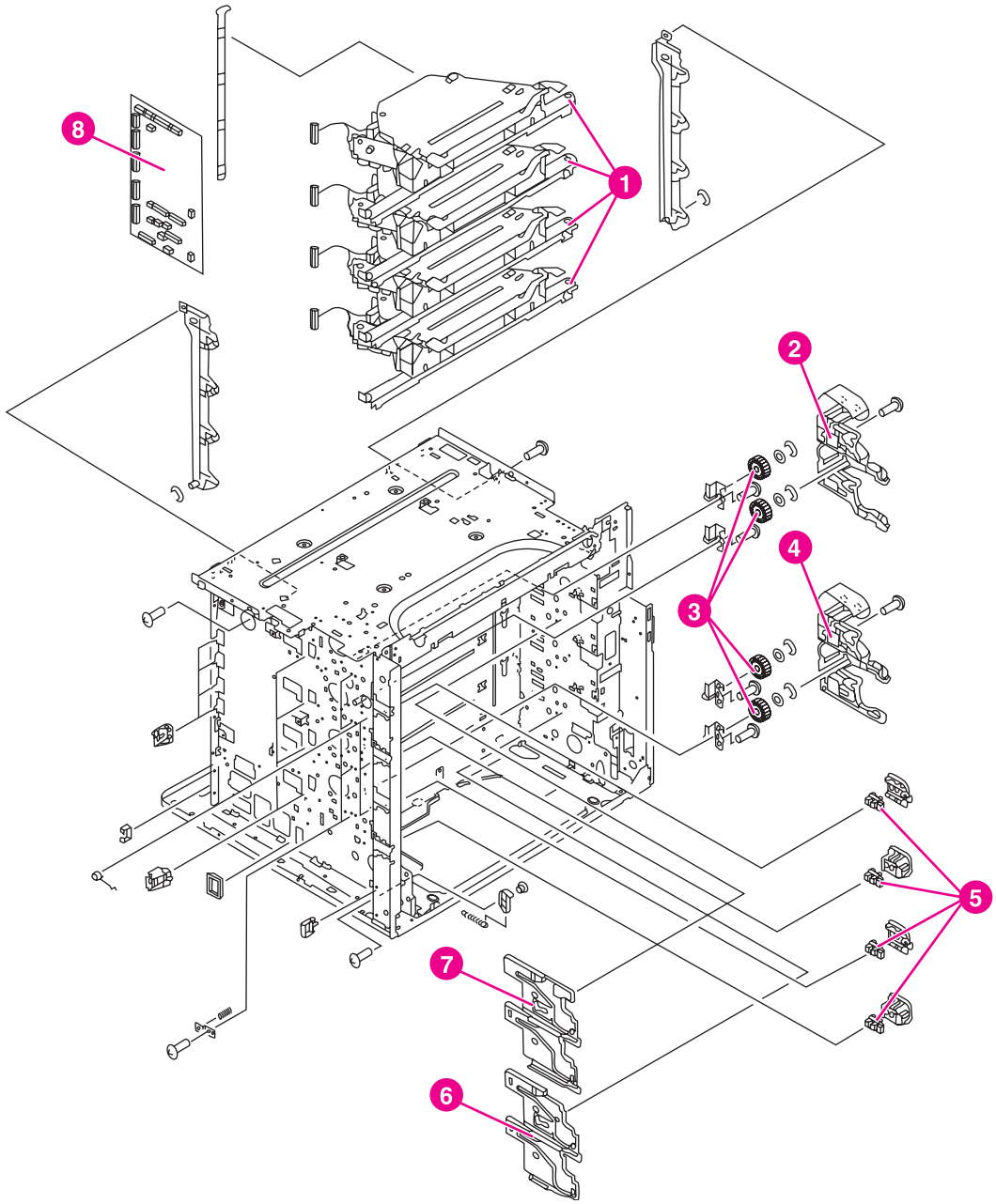


Figure 8-10. **Internal components (6 of 9)**

Table 8-11. Internal components (6 of 9)

Ref	Description	Part number	Qty
1	laser/scanner assembly, 5500 only	RG5-6736-000CN	4
1	laser/scanner assembly, 5550 only	RG5-7681--000CN	4
2	guide, cartridge, left upper	RB2-9391-000CN	1
3	gear, 36T	RS7-0326-000CN	4
4	guide, cartridge, left lower	RB2-9390-000CN	1
5	photo interrupter, TLP 1241	WG8-5362-000CN	4
6	guide, cartridge, right lower	RB2-9392-000CN	1
7	guide, cartridge, right upper	RB2-9393-000CN	1
8	DC controller PCB, 5550 only	RG5-7684-000CN	1
8	DC controller PCB, 5500 only	RG5-6850-070CN	1

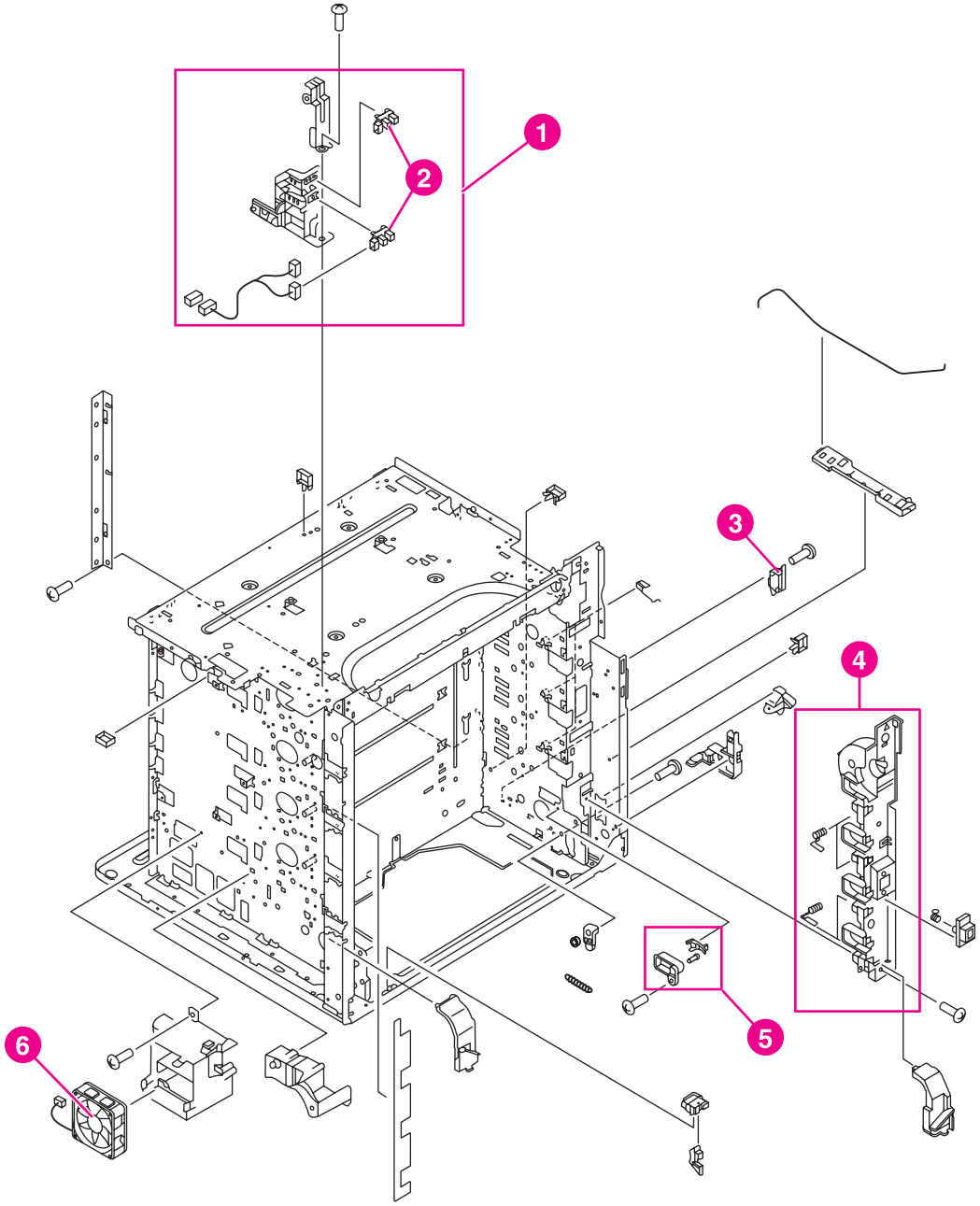


Figure 8-11. **Internal components (7 of 9)**

Table 8-12. Internal components (7 of 9)

Ref	Description	Part number	Qty
1	sensor and bracket assembly	RG5-6715-000CN	1
2	photo interrupter	WG8-5362-000CN	2
3	switch, cover safety	WC4-5188-000CN	1
4	cartridge inlet assembly	RG5-6726-000CN	1
5	contact assembly	RG5-6844-000CN	1
6	fan, power supply	RH7-1491-000CN	1

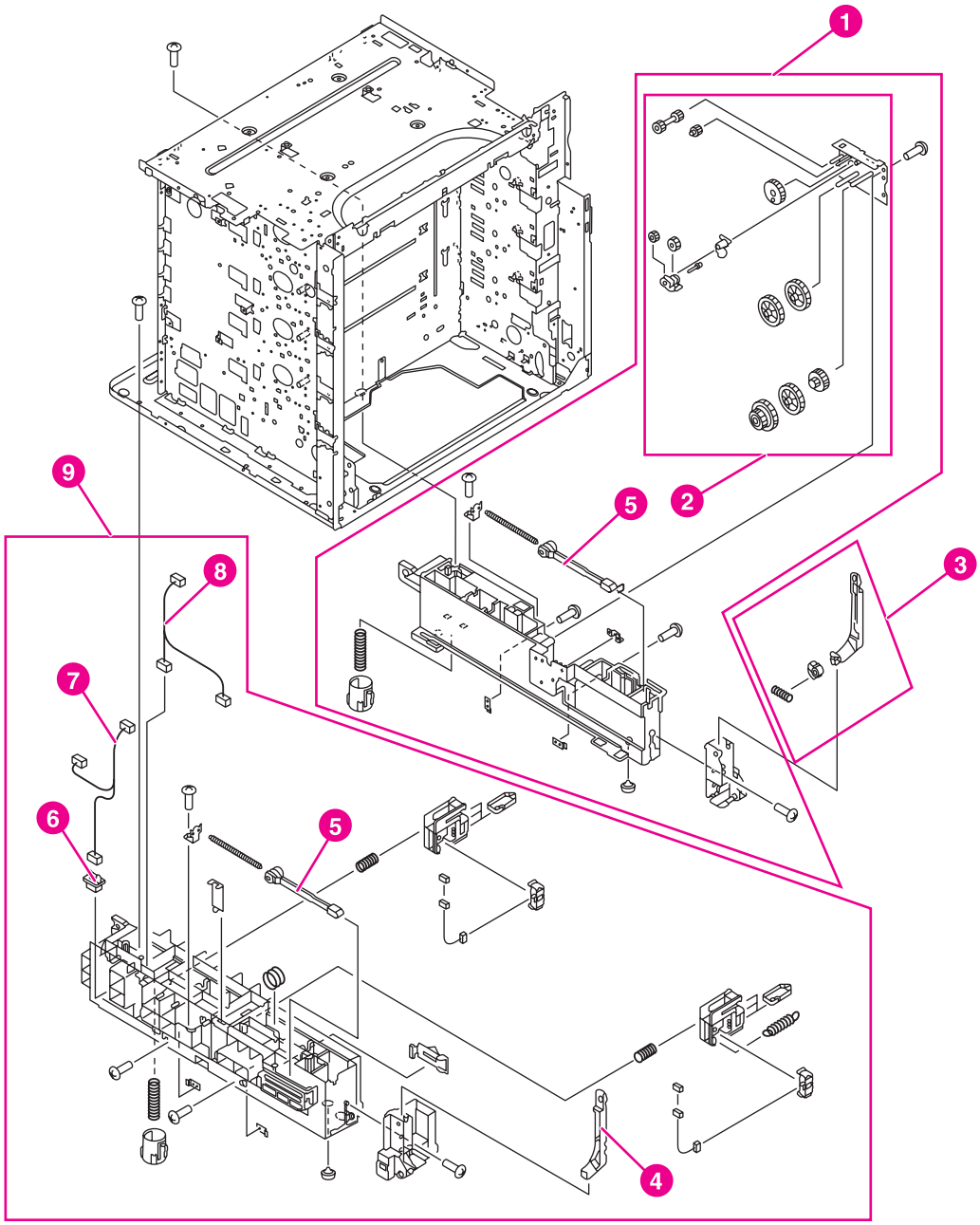


Figure 8-12. **Internal components (8 of 9)**

Table 8-13. Internal components (8 of 9)

Ref	Description	Part number	Qty
1	frame assembly, lower right	RG5-6673-000CN	1
2	lifter drive assembly	RG5-6676-000CN	1
3	link arm assembly, MP tray, right	RG5-6675-000CN	1
4	link, MP tray, left	RB2-9066-000CN	1
5	rod, spring	RB2-8213-000CN	2
6	connector, 6-pin, J39	VS1-6760-006CN	1
7	paper feeder cable	RG5-6836-000CN	1
8	cable, paper size	RG5-6821-000CN	1
9	frame assembly, lower left	RG5-6672-040CN	1

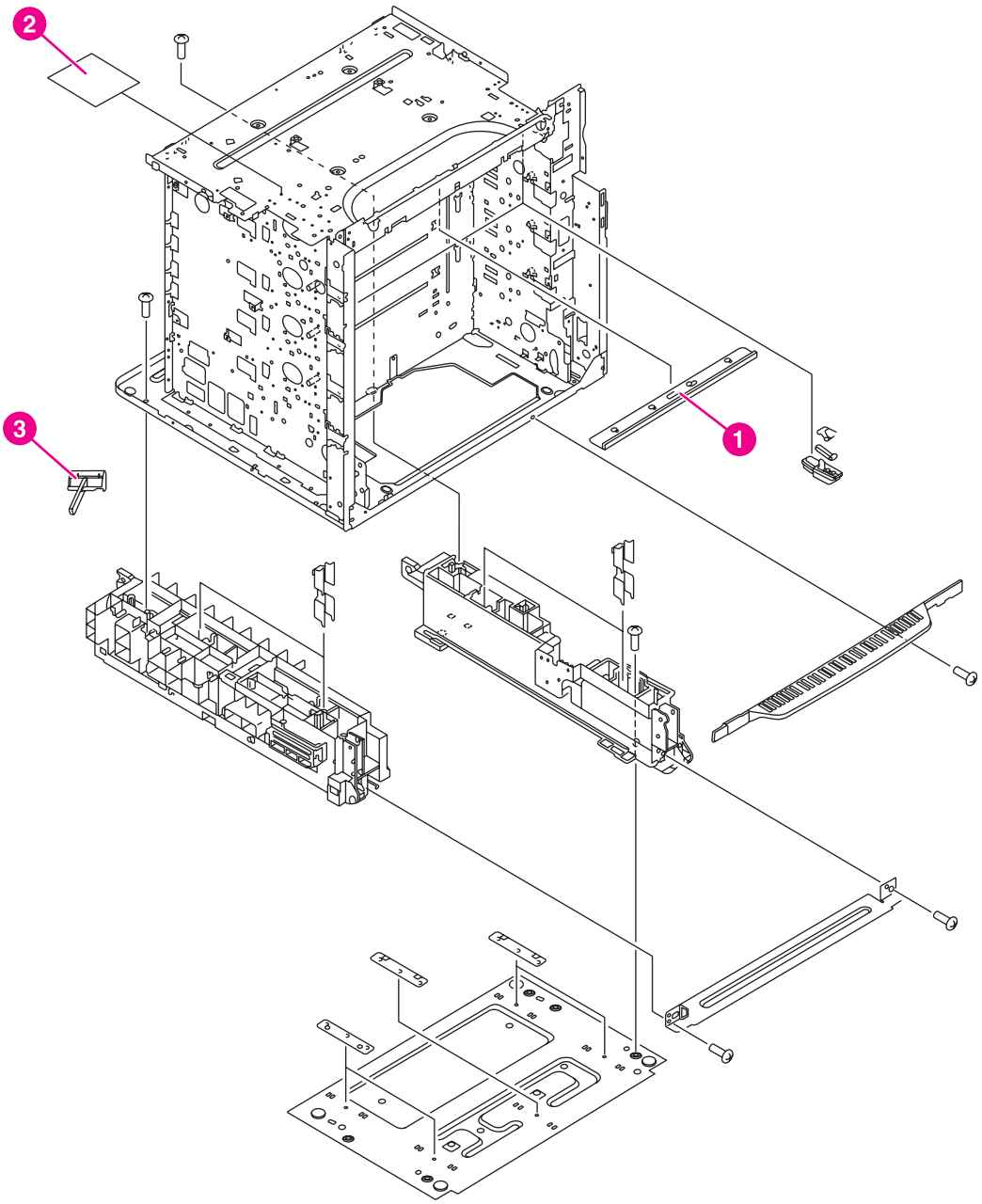


Figure 8-13. **Internal components (9 of 9)**

Table 8-14. Internal components (9 of 9)

Ref	Description	Part number	Qty
1	static discharge comb, 5500 only	RG5-6846-000CN	1
1	static discharge comb KH, 5550 only	Q3713-67901	1
2	static discharge PCB assembly	RG5-6845-000CN	1
3	static discharge cleaning brush	RB2-9561-030CN	1

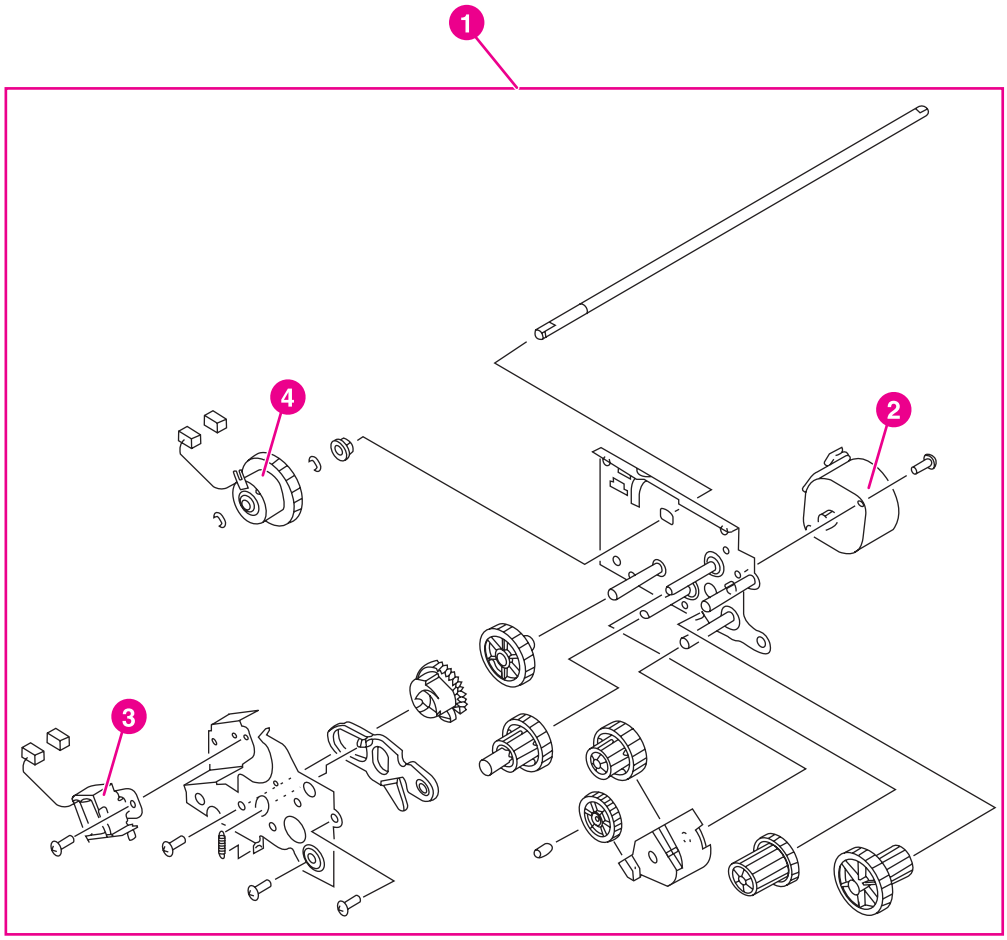


Figure 8-14. **Paper pickup drive assembly**

Table 8-15. Paper pickup drive assembly

Ref	Description	Part number	Qty
1	paper pickup drive assembly, 5550 only	RG5-7711-000CN	1
1	paper pickup drive assembly, 5500 only	RG5-6661-070CN	1
2	motor, PM2, pickup motor 5550 only	RH7-1619-000CN	1
2	motor, PM2, pickup motor 5500 only	RH7-1523-000CN	1
3	solenoid	RH7-5330-000CN	1
4	clutch	RH7-5329-000CN	1

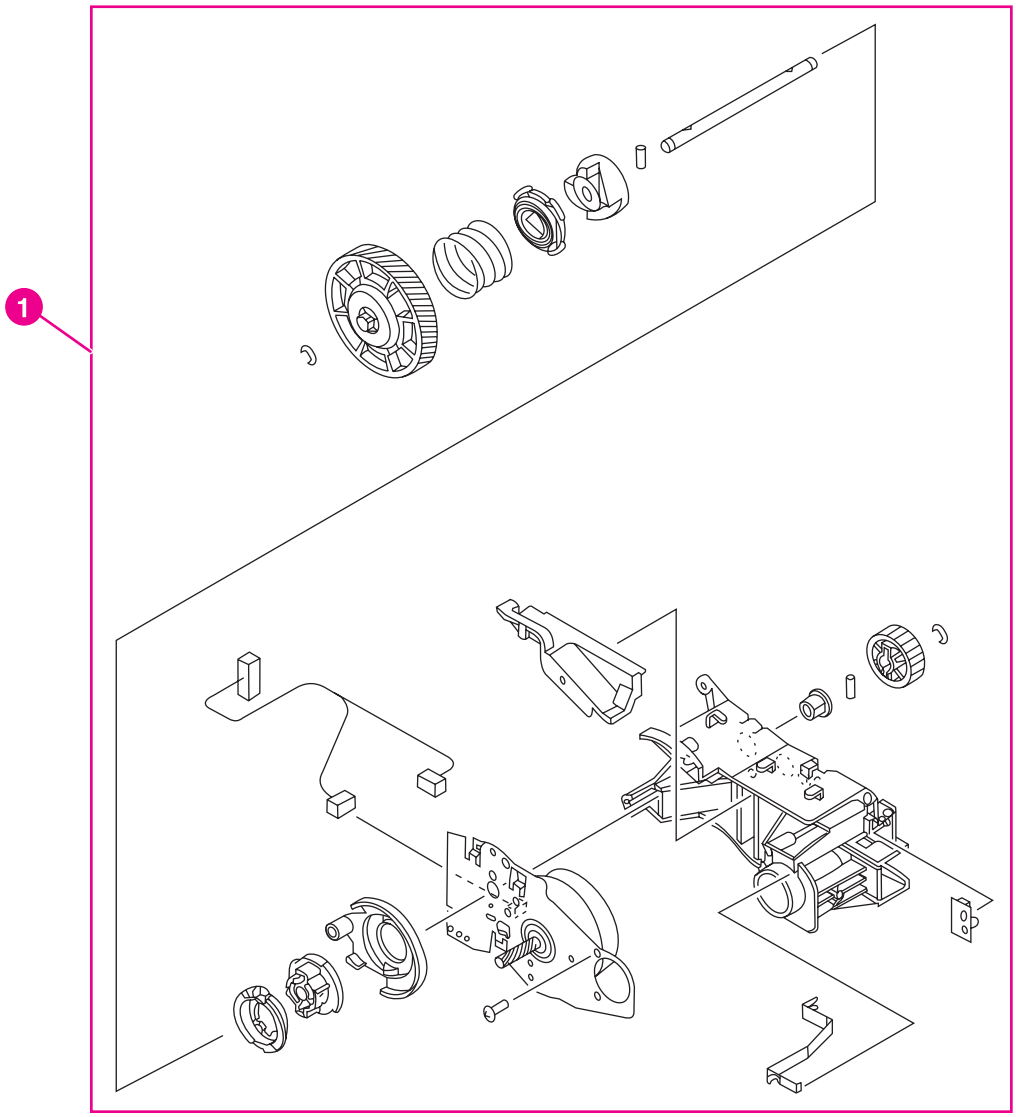


Figure 8-15. **Drum drive assembly**

Table 8-16. Drum drive assembly

Ref	Description	Part number	Qty
1	drum drive assembly (cyan/magenta)	RG5-7723-000CN (cyan/ magenta)	2
1	drum drive assembly (black)	RG5-7725-000CN (black)	1
1	drum drive assembly (yellow)	RG5-7724- 000CN (yellow)	1

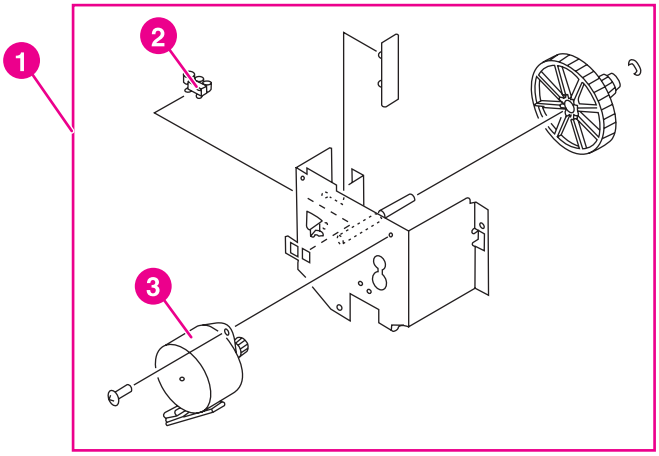


Figure 8-16. **Disengaging drive assembly**

Table 8-17. Disengaging drive assembly

Ref	Description	Part number	Qty
1	disengaging drive assembly	RG5-6719-000CN	1
2	photo interrupter, TLP1241	WG8-5362-000CN	1
3	motor, PM1, developing disengaging	RH7-1524-000CN	1

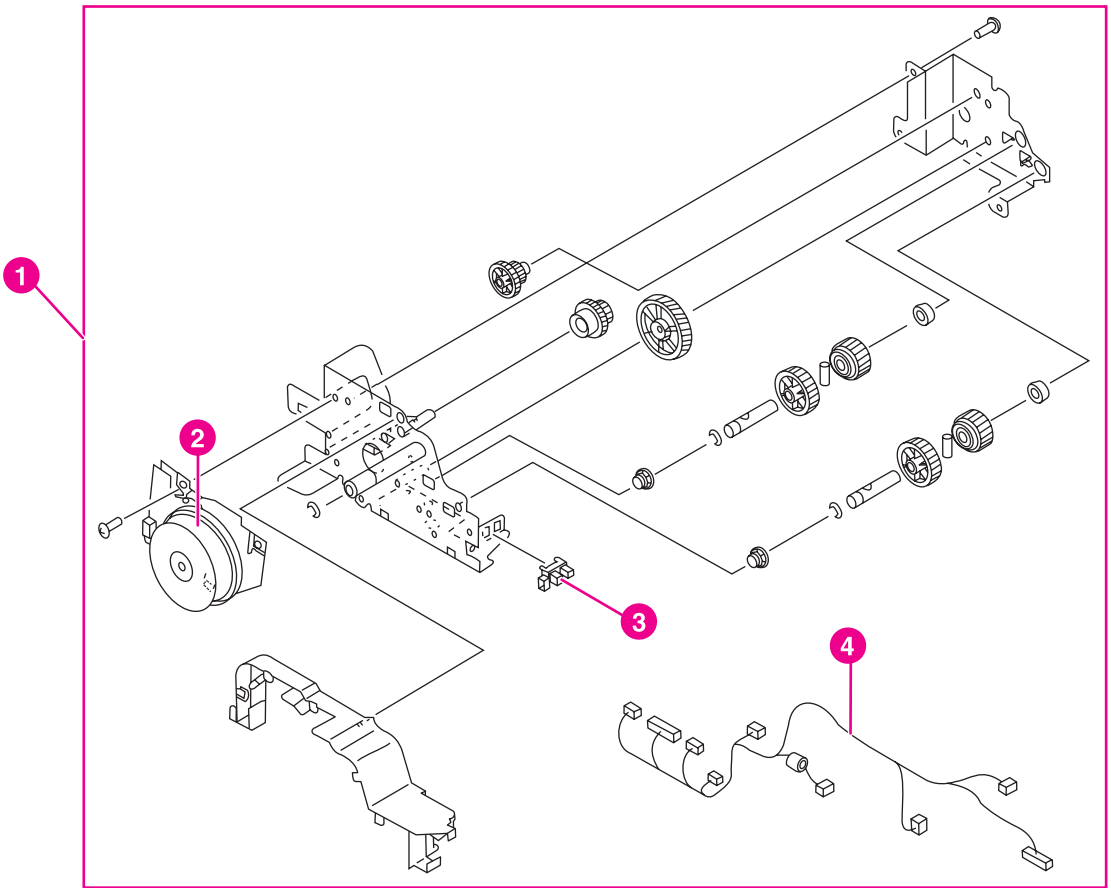


Figure 8-17. **Fuser drive assembly**

Table 8-18. Fuser drive assembly

Ref	Description	Part number	Qty
1	fuser drive assembly, 5550 only	RG5-7700-000CN	1
1	fuser drive assembly, 5500 only	RG5-6714-000CN	1
2	motor, M5, fuser	RH7-1617-000CN	1
3	photo interrupter, TLP1241	WG8-5362-000CN	1
4	cable, upper crossmember 5550 only	RG5-7687-000CN	1
4	cable, upper crossmember, 5500 only	RG5-6823-000CN	1

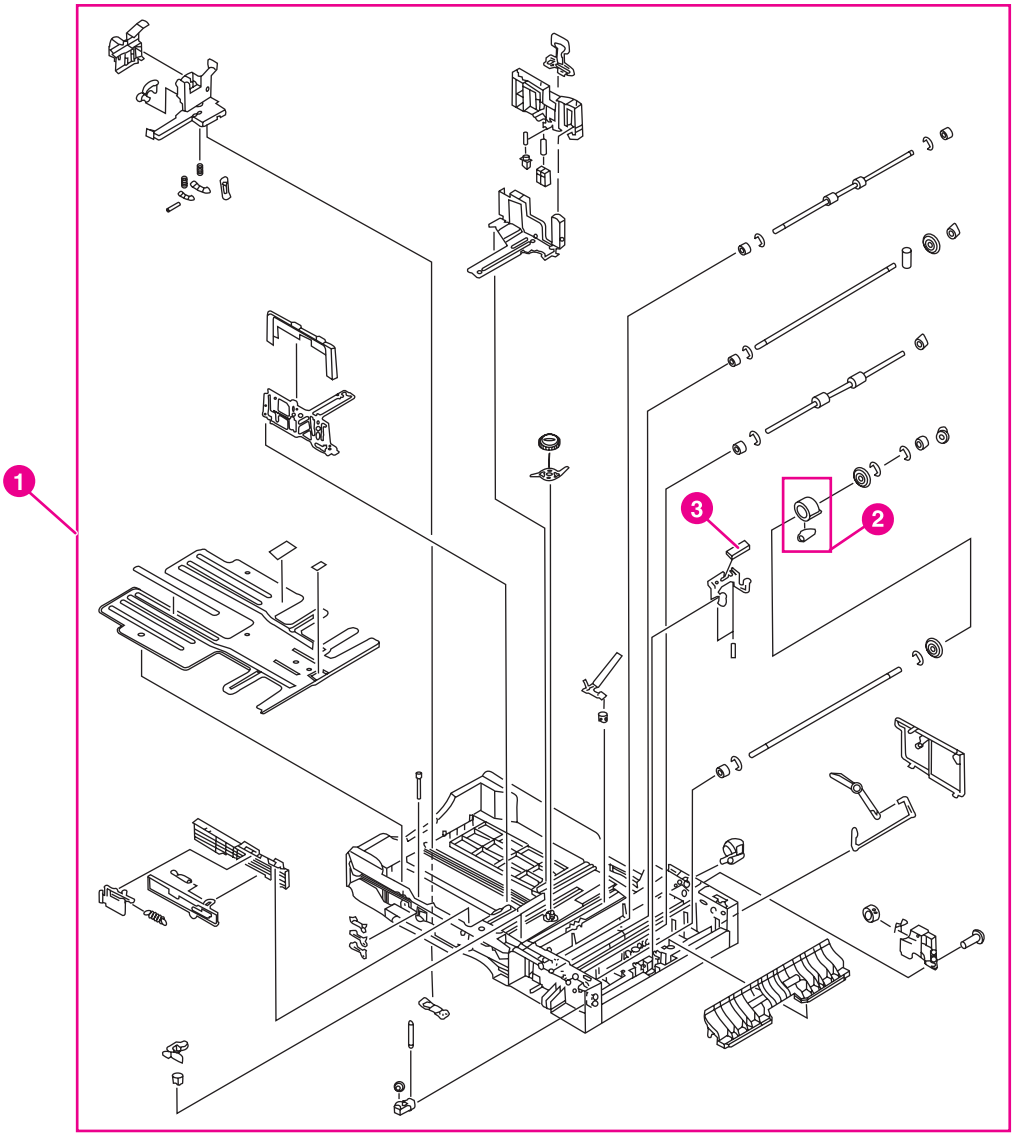


Figure 8-18. **Cassette (1 of 2)**

Table 8-19. Cassette

Ref	Description	Part number	Qty
1	cassette (Tray 2)	RG5-6647-150CN	1
2	roller assembly, MP tray pickup	RG9-1529-000CN	1
3	separation pad	RF5-3865-000CN	1
4	roller, separation	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit), see note below	1

NOTE When you replace the separation roller, you should also replace the cassette feed roller and cassette pickup roller at the same time. The roller kit includes all three rollers.

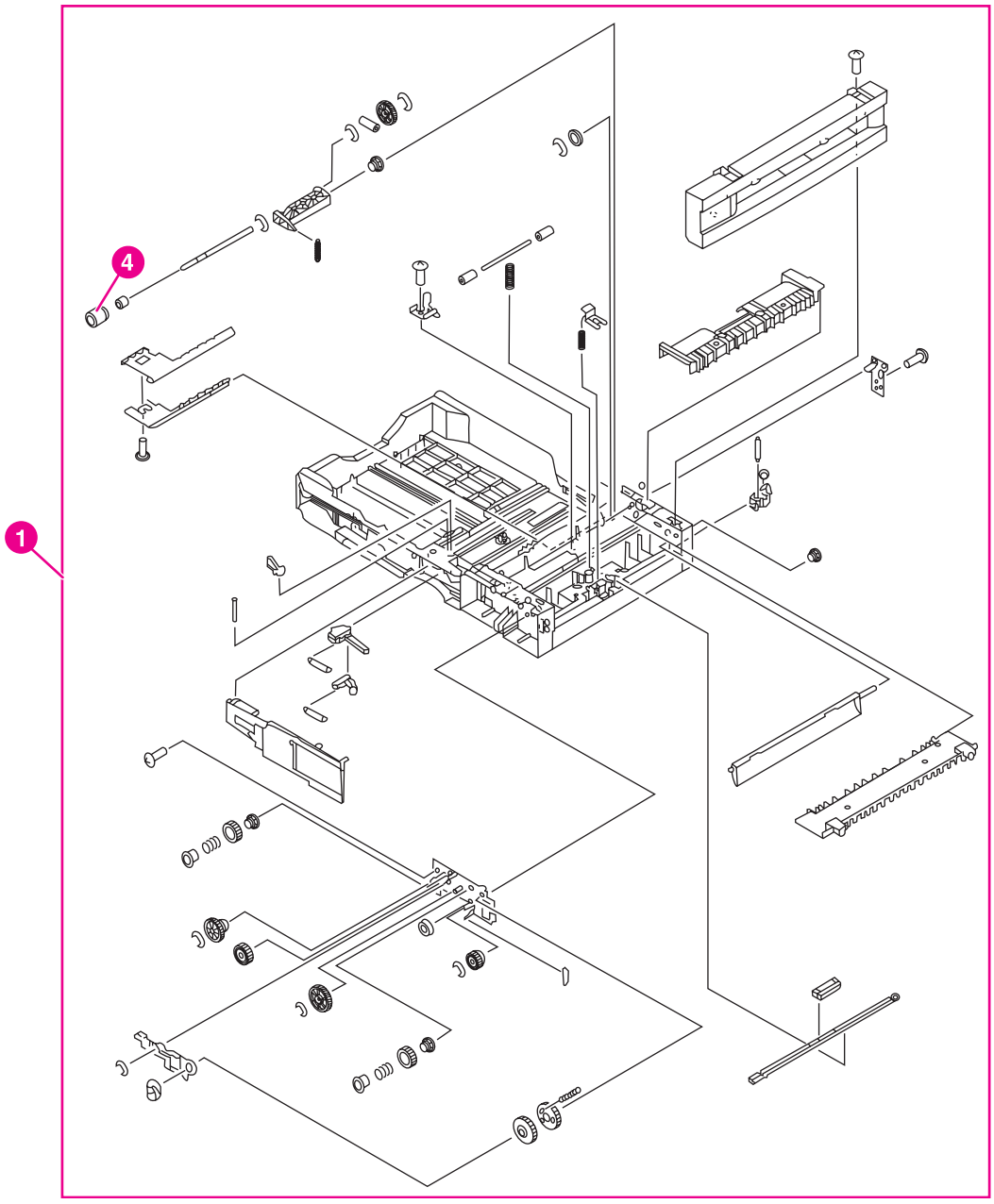


Figure 8-19. **Cassette (2 of 2)**

NOTE Table 8-19. Cassette lists parts shown in Figure 8-18. Cassette (1 of 2) and Figure 8-19. Cassette (2 of 2). If you order a replacement cassette (item 1), you will receive all parts shown in both figures.

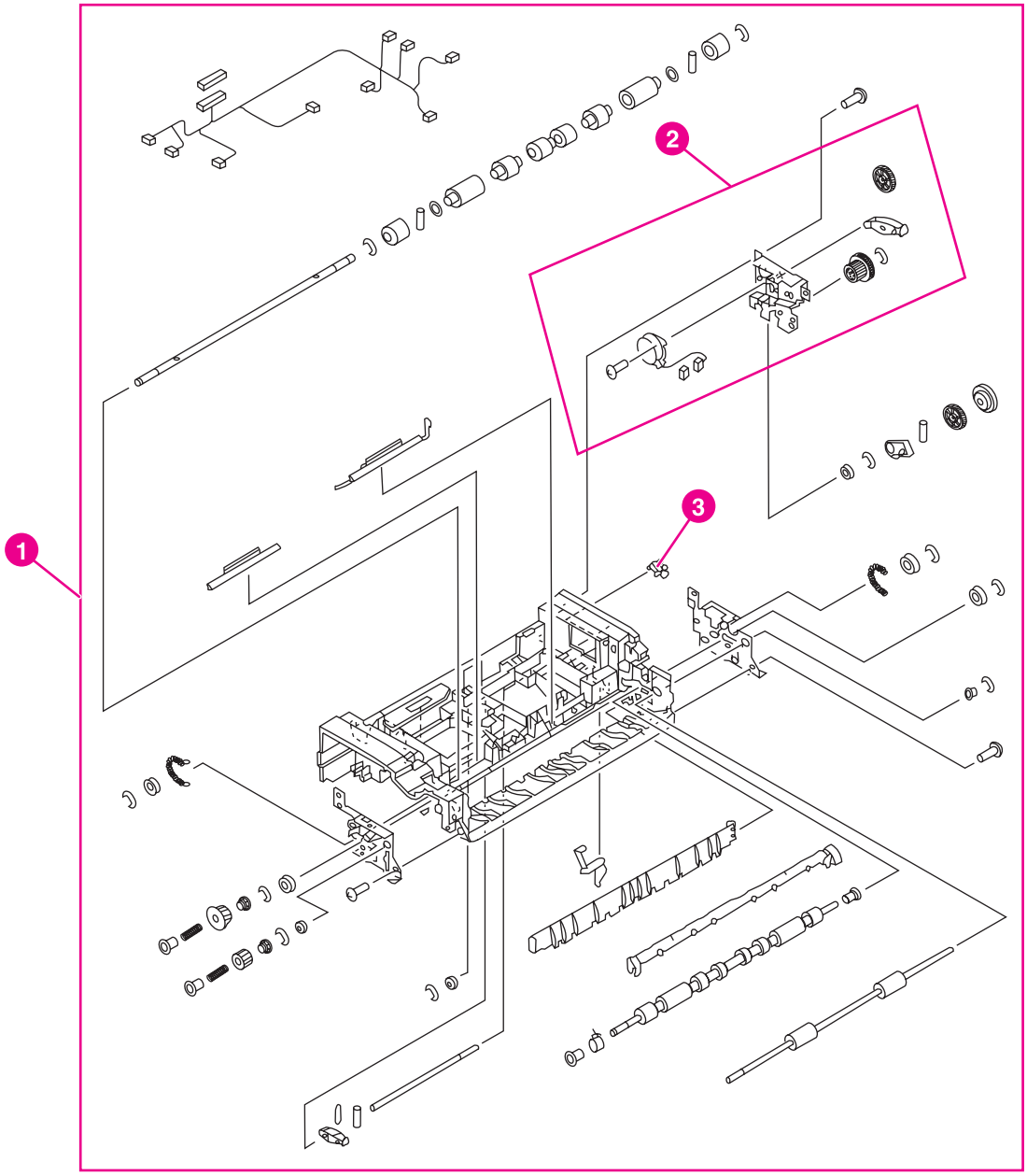


Figure 8-20. **Paper pickup assembly (1 of 2)**

Table 8-20. Paper pickup assembly (1 of 2)

Ref	Description	Part number	Qty
1	paper pickup assembly, 5550 only	RG5-7709-000CN	1
1	paper pickup assembly, 5500 only	RG5-6670-110CN	1
2	lifter drive assembly	RG5-6665-000CN	1
3	photo interrupter, TLP 1241	WG8-5362-000CN	1
4	cassette sensor PCB	RG5-6807-000CN	1
5	multi-purpose tray sensor PCB	RG5-6806-000CN	1
6	paper pickup drive unit, 5550 only	RG5-7711-000CN	1
6	paper pickup drive assy, 5500 only	RG5-6661-070CN	1
7	roller, cassette feed	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	1
8	roller, cassette pickup	RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	1

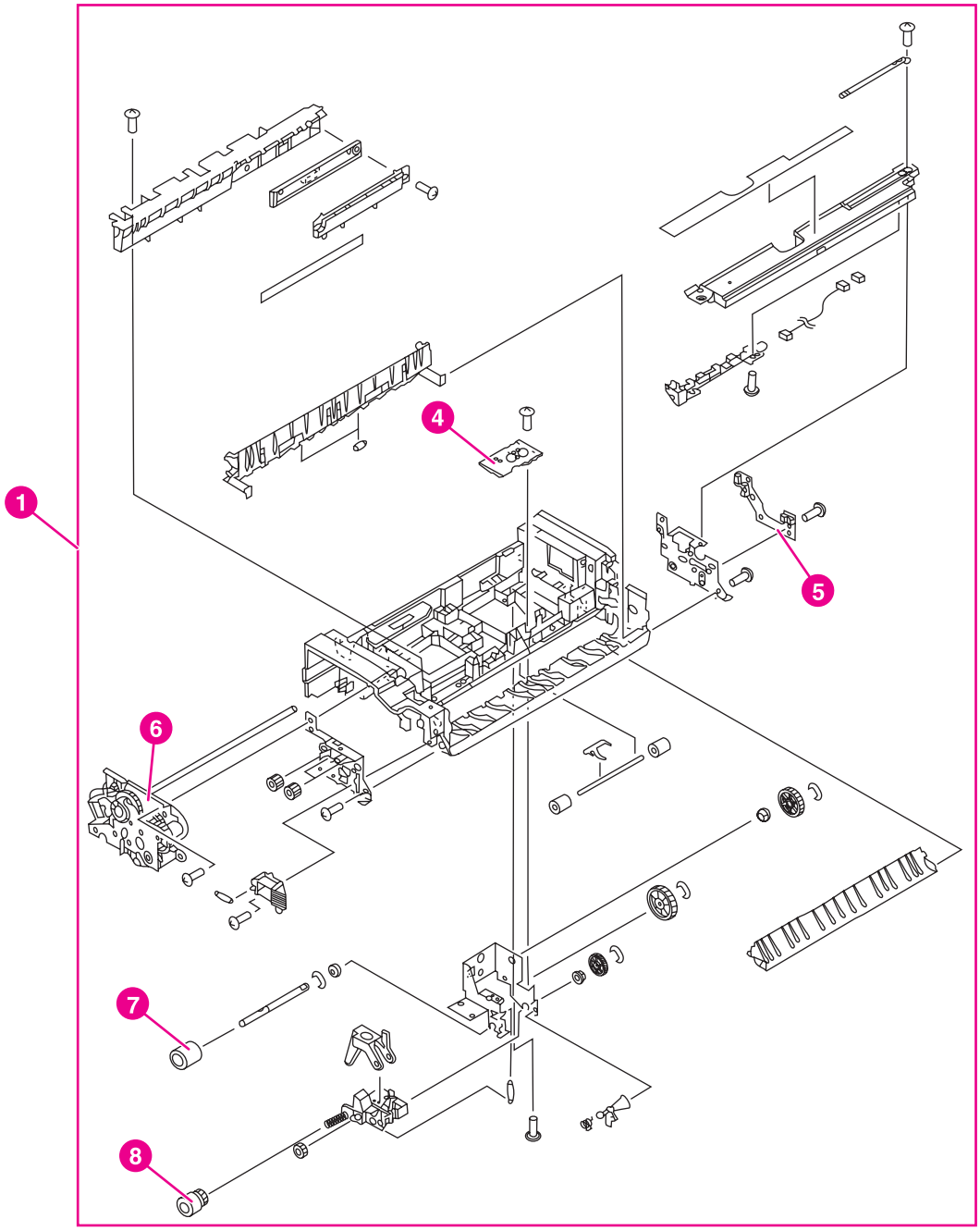


Figure 8-21. **Paper pickup assembly (2 of 2)**

NOTE Table 8-20. Paper pickup assembly (1 of 2) lists parts shown in Figure 8-20. Paper pickup assembly (1 of 2) and Figure 8-21. Paper pickup assembly (2 of 2). If you order a replacement paper pickup unit (item 1), you will receive all parts shown in both figures.

NOTE You should always replace the cassette pickup roller, the cassette feed roller, and the cassette separation roller at the same time. The roller kit includes all three rollers.

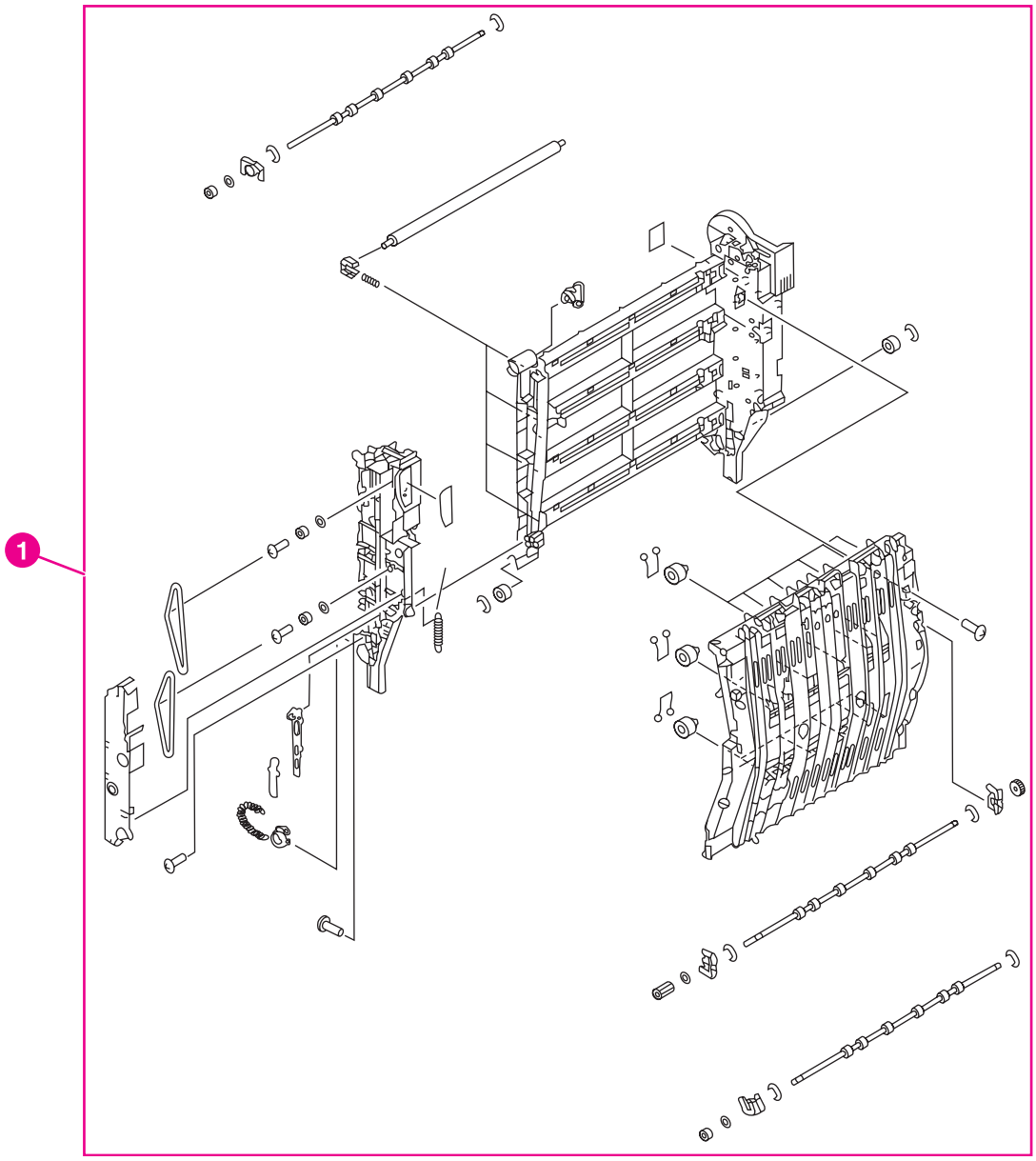


Figure 8-22. **ETB assembly (1 of 2)**

Table 8-21. ETB assembly

Ref	Description	Part number	Qty
1	ETB assembly	RG5-7737-000CN (new), C9656-69001 (exchange)	1
2	motor, M6, ETB	RH7-1618-000CN	1

NOTE Table 8-21. ETB assembly lists parts shown in Figure 8-22. ETB assembly (1 of 2) and Figure 8-23. ETB assembly (2 of 2). If you order a replacement ETB (item 1), you will receive all parts shown in both figures.

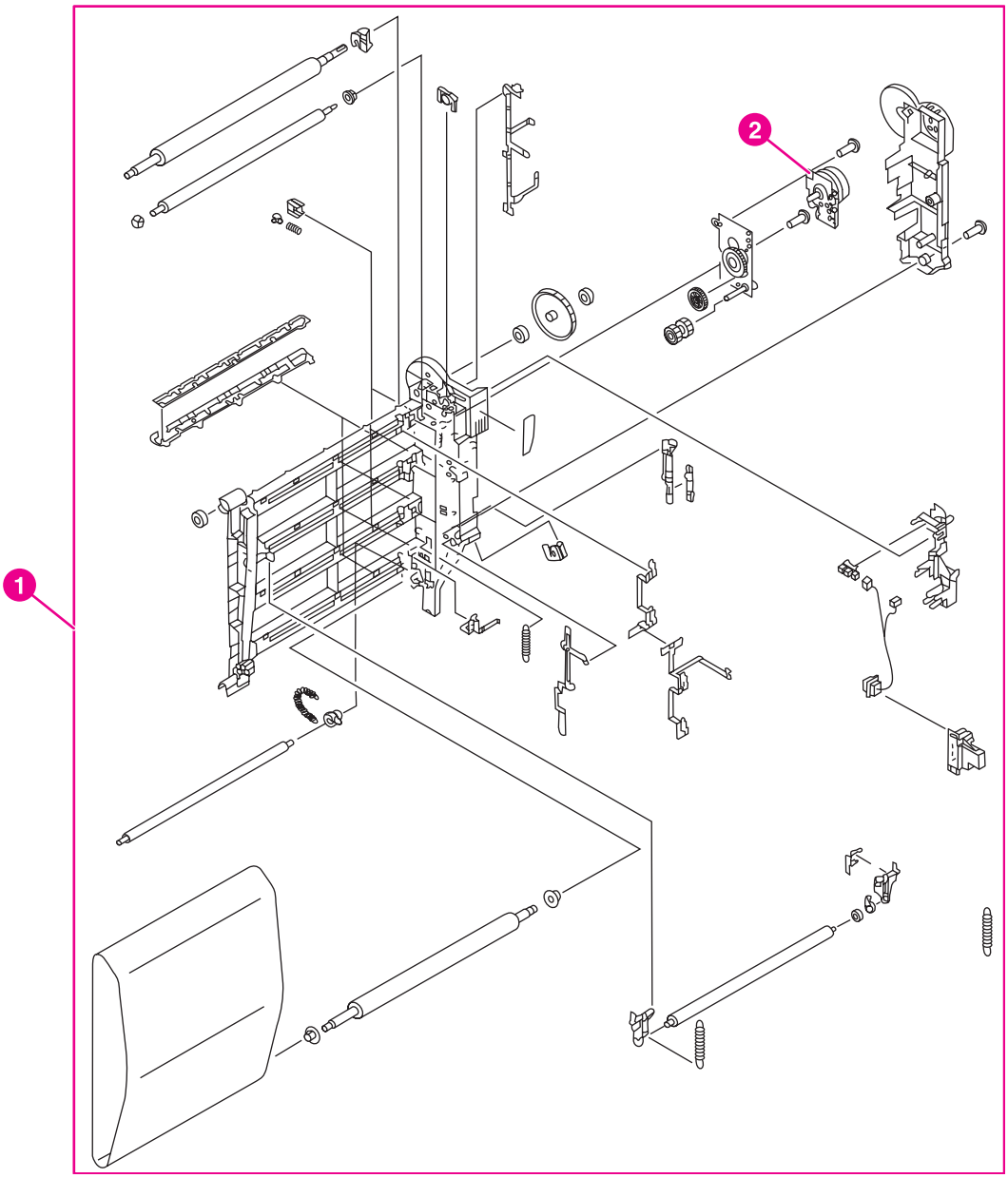


Figure 8-23. **ETB assembly (2 of 2)**

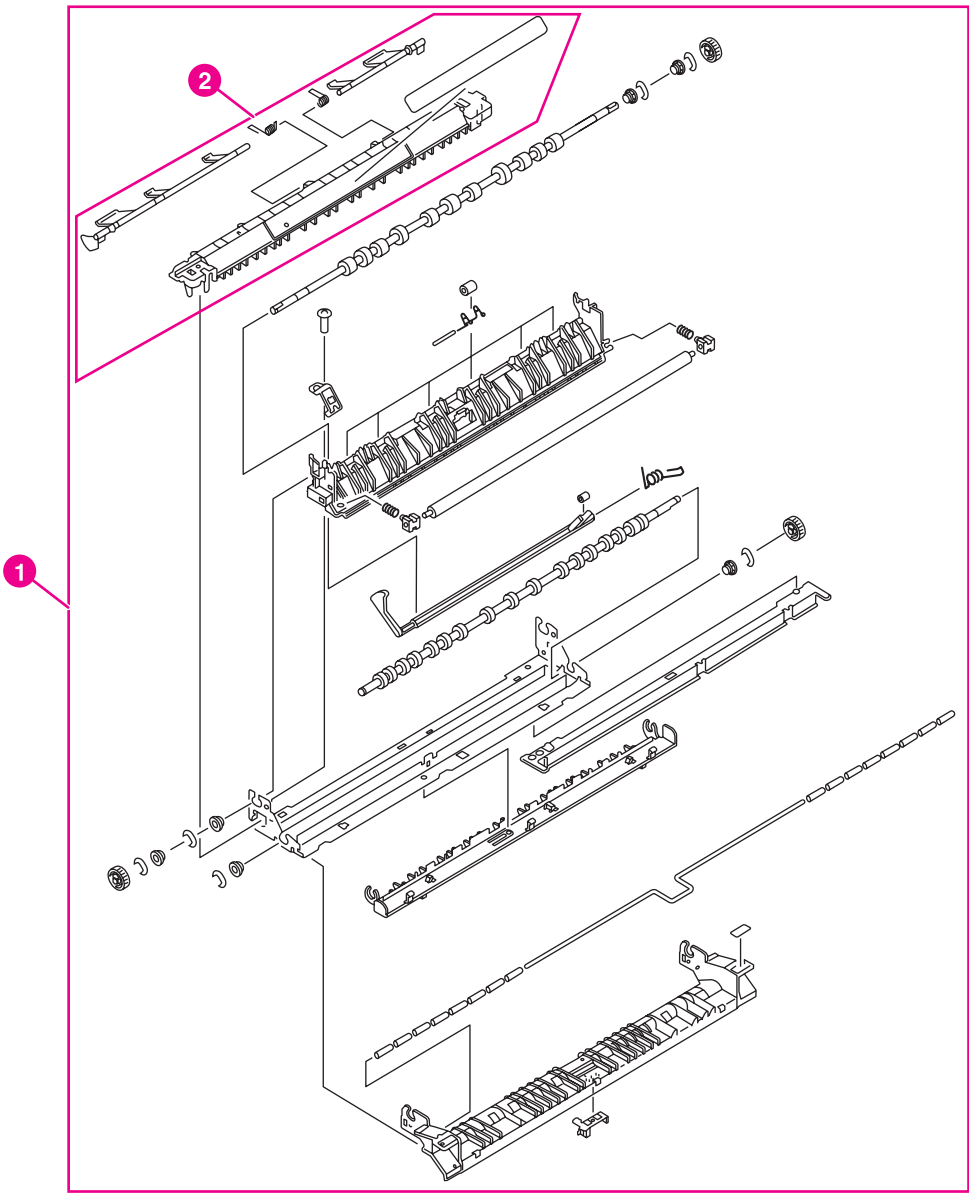


Figure 8-24. **Fuser assembly (1 of 2)**

Table 8-22. Fuser assembly

Ref	Description	Part number	Qty
1	fuser assembly, 5500 only	RG5-6848-150CN (110 volt, new), C9656-69016 (110 volt, exchange), RG5-6701-000CN (220 volt, new), C9656-69005 (220 volt, exchange)	1
1	fuser assembly, 5550 only	RG5-7691-000CN (110 volt, new), Q3984-69001 (110 volt, exchange), RG5-7692-000CN (220 volt, new), Q3985-69001 (220 volt, exchange)	1
2	sensor flag assembly	RG5-6842-040CN	1

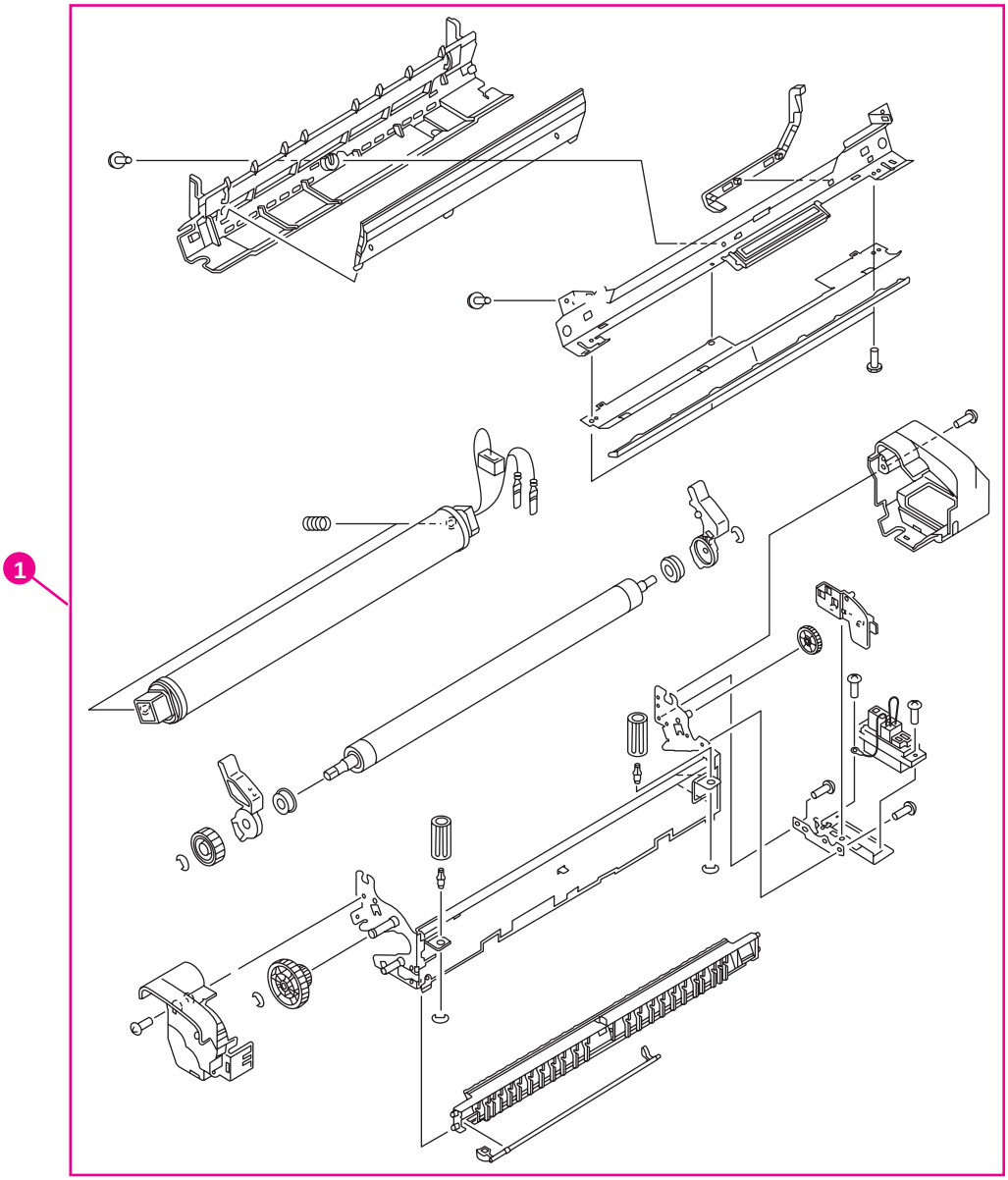


Figure 8-25. **Fuser assembly (2 of 2)**

NOTE Table 8-22. Fuser assembly lists parts shown in Figure 8-24. Fuser assembly (1 of 2) and Figure 8-25. Fuser assembly (2 of 2). If you order a replacement fuser, you will receive all the parts shown in both figures.

Illustrations and parts lists (500-sheet paper feeder)

The following illustrations and parts tables list the field replaceable units (FRU) for the 500-sheet paper feeder on this printer.

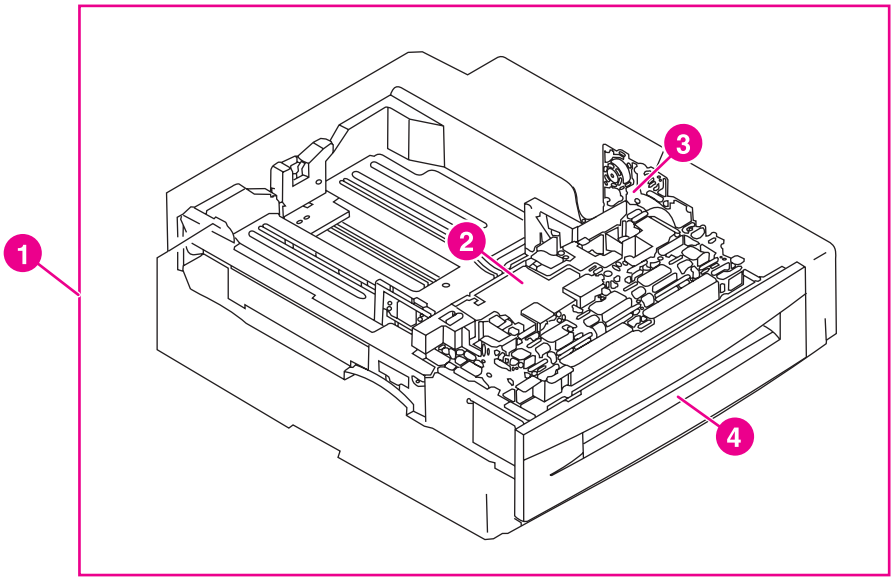


Figure 8-26. **500-sheet paper feeder assembly location diagram**

Table 8-23. 500-sheet paper feeder assemblies

Ref	Description	Part number	Qty
1	optional 500-sheet paper feeder and Tray 3 (or Tray 4) assembly	C7130-67901	1
2	paper pickup unit, 500-sheet feeder (see Figure 8-32. 500-sheet paper feeder paper pickup assembly)	RG5-6748-050CN	1
3	lifter drive unit, 500-sheet feeder (see Figure 8-31. 500-sheet paper feeder lifter drive assembly)	RG5-6753-030CN	1
4	cassette, 500-sheet feeder (see Figure 8-29. 500-sheet paper feeder cassette (1 of 2))	RG5-6770-140CN	1

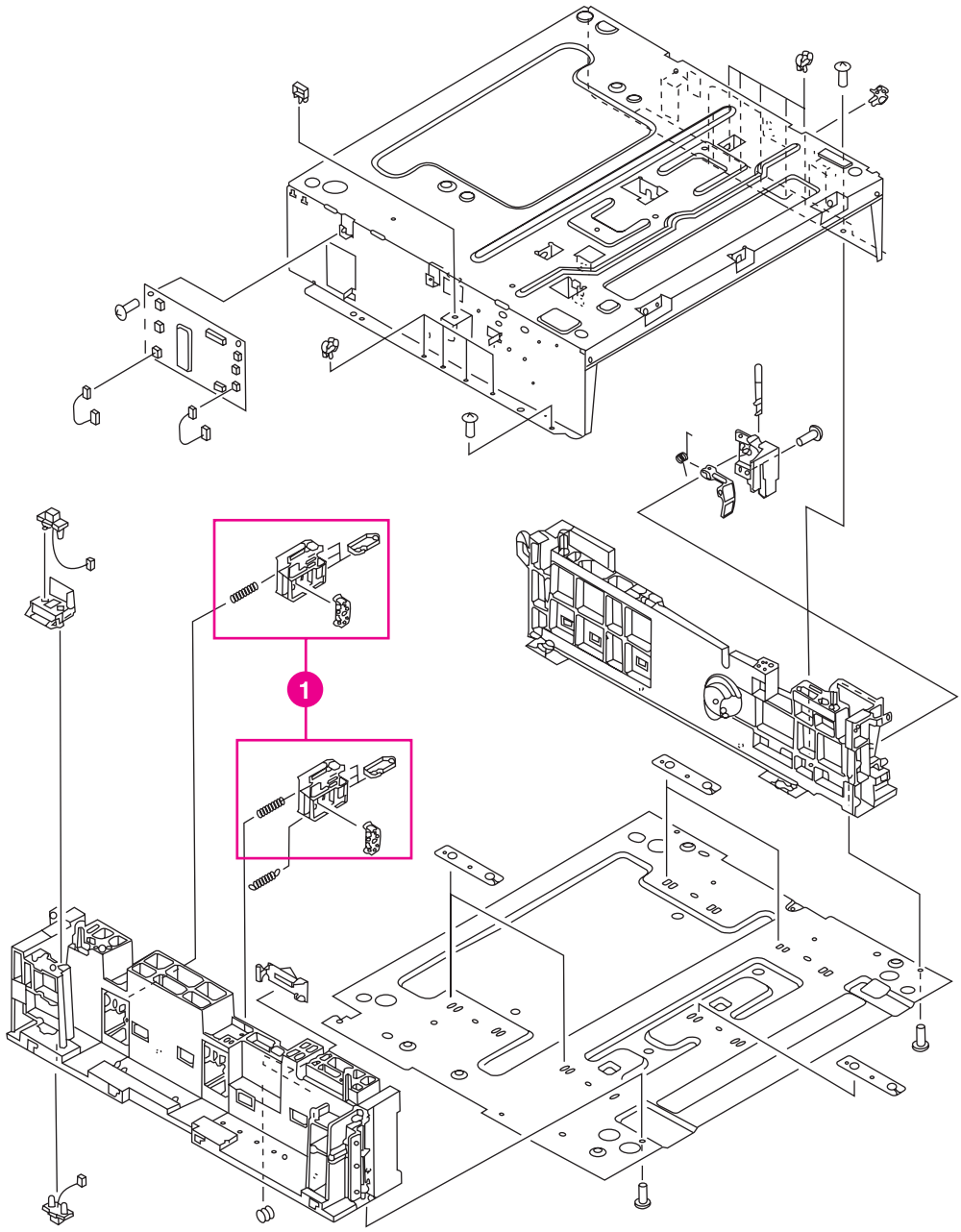


Figure 8-27. **500-sheet paper feeder internal components (1 of 2)**

Table 8-24. 500-sheet paper feeder internal components

Ref	Description	Part number	Qty
1	paper size detection assembly, 500-sheet feeder	RG5-6769-000CN	2
2	screw, security	RS5-9175-000CN	4
3	lifter drive unit, 500-sheet feeder	RG5-6753-030CN	1
4	paper pickup unit, 500-sheet feeder	RG5-6748-050CN	1
5	motor, 500-sheet feeder	RH7-1524-000CN	1
6	clutch assembly, 500-sheet feeder	RG5-6761-000CN	1
7	paper feeder PCB 5550 only	RG5-7718-000CN	1
7	paper feeder PCB 5500 only	RG5-6772-000CN	1

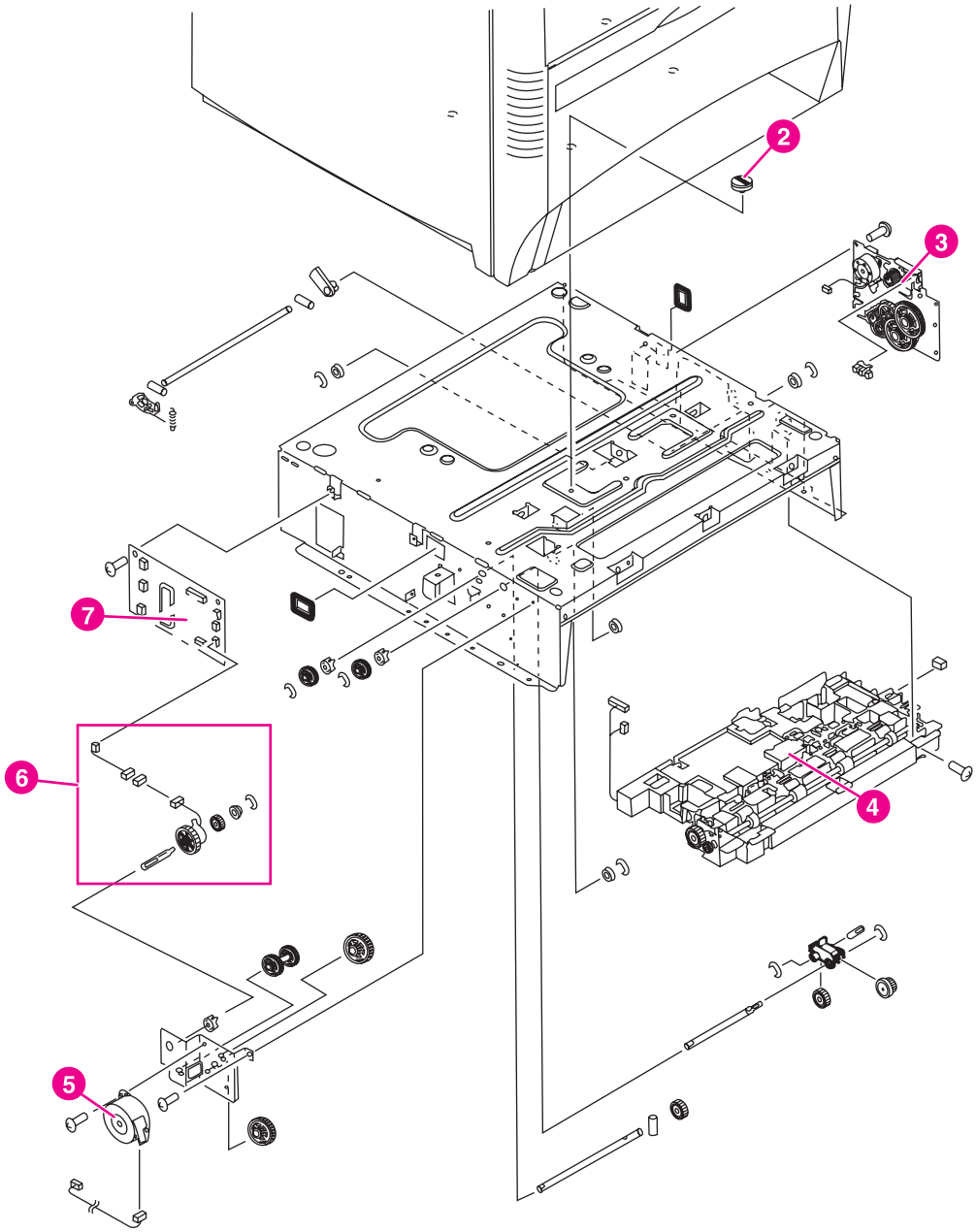


Figure 8-28. **500-sheet paper feeder internal components (2 of 2)**

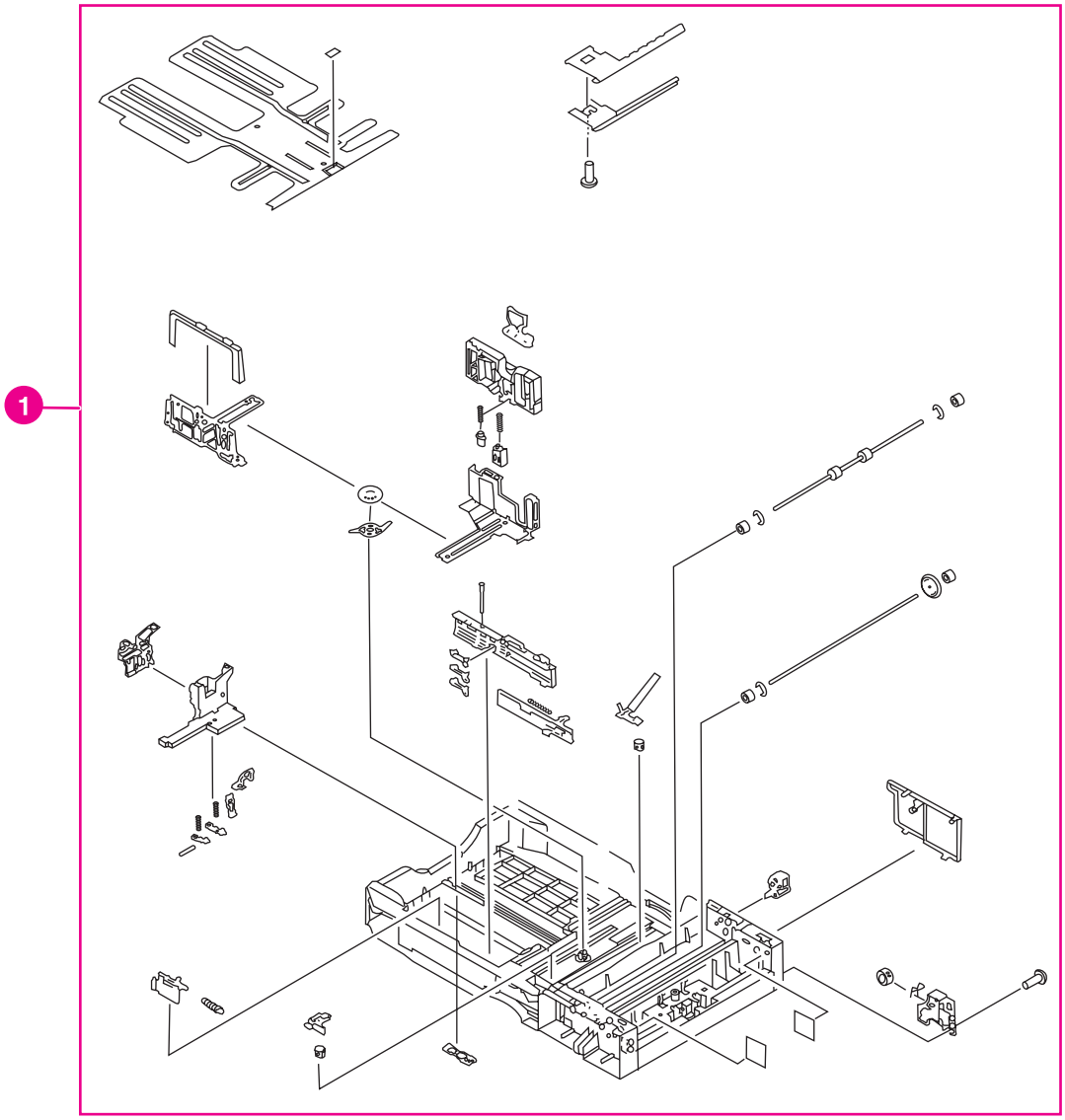


Figure 8-29. **500-sheet paper feeder cassette (1 of 2)**

Table 8-25. 500-sheet paper feeder cassette

Ref	Description	Part number	Qty
1	cassette, 500-sheet feeder	RG5-6770-140CN	1
2	roller, separation	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) See second note below.	1

NOTE Solenoid and clutch lists parts shown in Figure 8-29. 500-sheet paper feeder cassette (1 of 2) and Figure 8-30. 500-sheet paper feeder cassette (2 of 2). If you order a replacement cassette (item 1), you will receive all parts shown in both figures.

NOTE Whenever you replace the separation roller, you should also replace the cassette feed roller and the cassette pickup roller. The roller kit includes all three rollers.

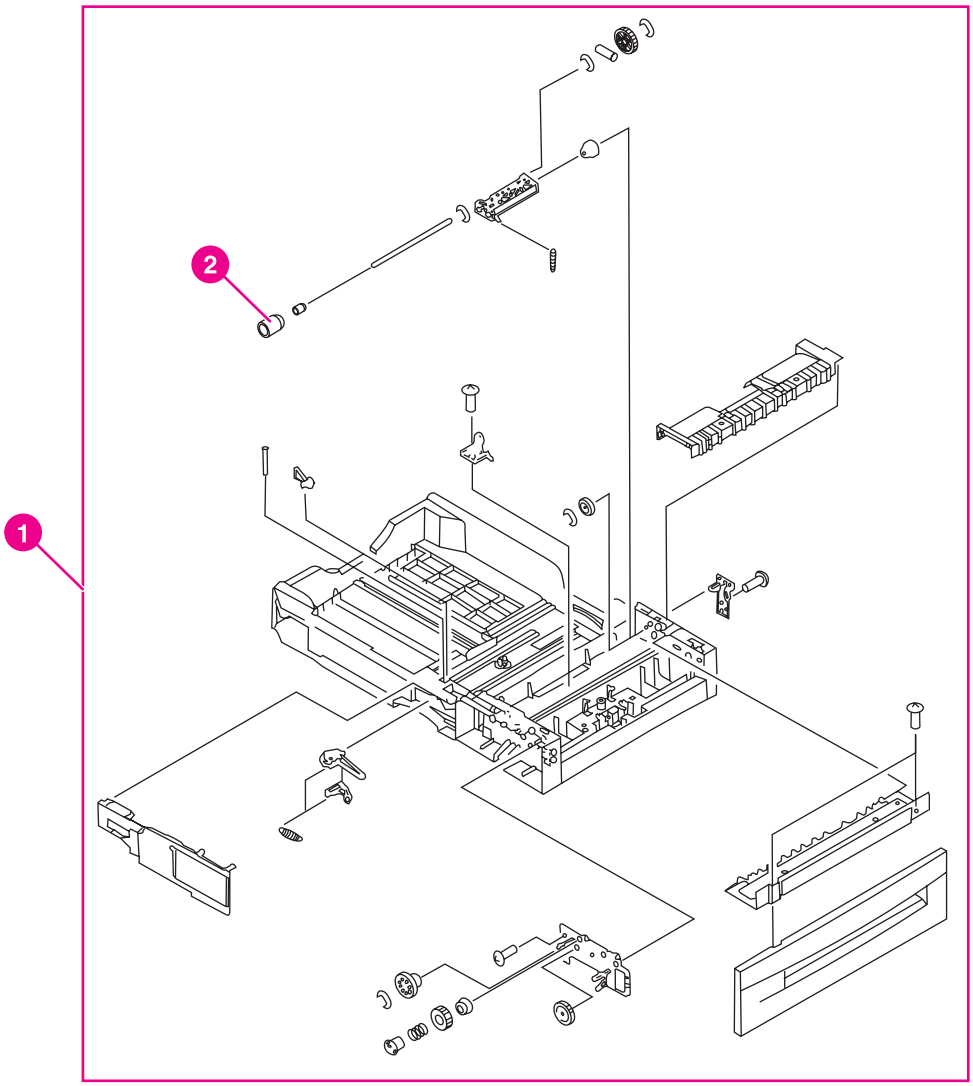


Figure 8-30. **500-sheet paper feeder cassette (2 of 2)**

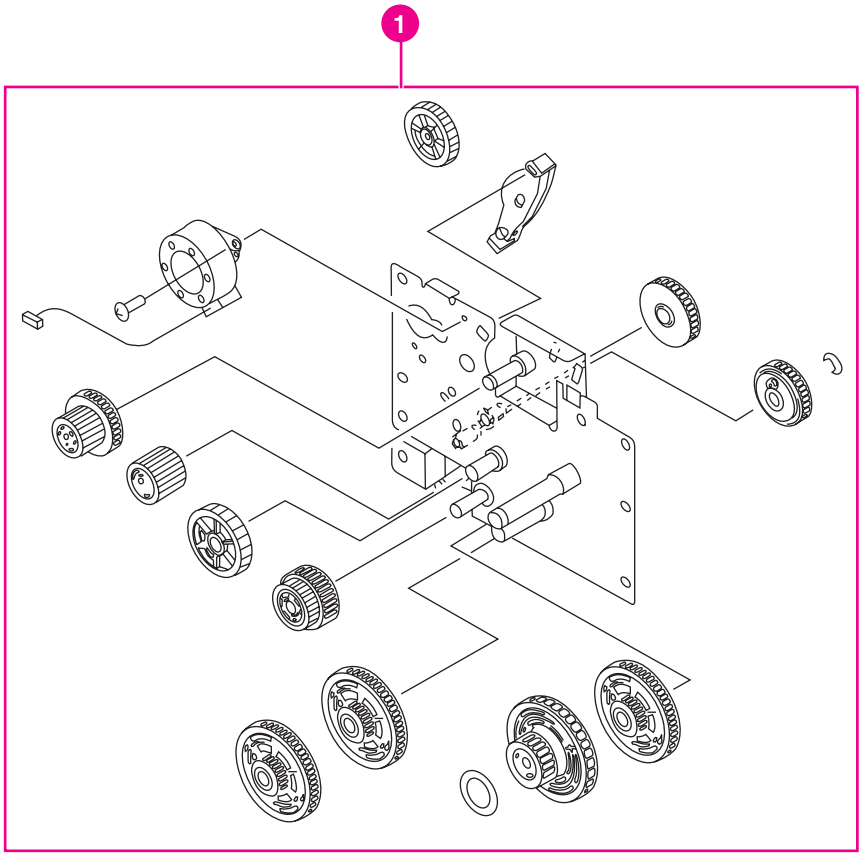


Figure 8-31. **500-sheet paper feeder lifter drive assembly**

Table 8-26. 500-sheet paper feeder lifter drive assembly

Ref	Description	Part number	Qty
1	lifter drive unit, 500-sheet feeder	RG5-6753-000CN	1

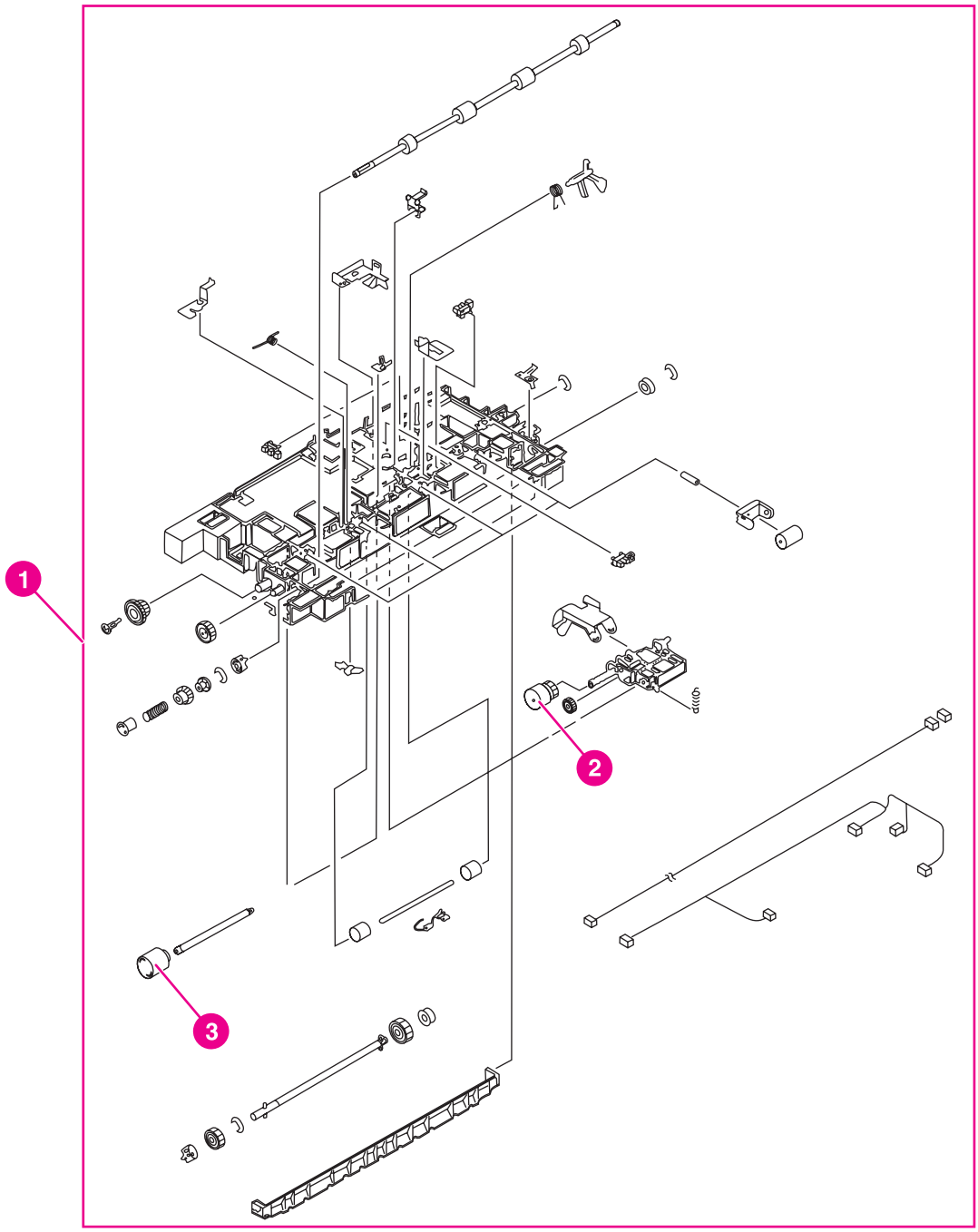


Figure 8-32. **500-sheet paper feeder paper pickup assembly**

Table 8-27. 500-sheet paper feeder paper pickup assembly

Ref	Description	Part number	Qty
1	paper pickup unit, 500-sheet feeder	RG5-6748-050CN	1
2	roller, feed	RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit)	1
3	roller, pickup	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit)	1

NOTE Always replace the cassette feed roller, the cassette pickup roller, and the separation roller at the same time. The roller kit includes all three rollers.

Alphabetical parts list

Table 8-28. Alphabetical parts list

Description	Part number	Table and page
brush, cleaning	RB2-9145-000CN	Table 8-9 on page 485
cable, AC	RG5-6815-000CN	Table 8-10 on page 487
cable, DC	RG5-6816-000CN	Table 8-7 on page 481
cable, fan	RG5-6820-000CN	Table 8-9 on page 485
cable, flat	RH2-5510-000CN	Table 8-7 on page 481
cable, flat	RH2-5511-000CN	Table 8-9 on page 485
cable, formatter interface	RG5-6834-000CN	Table 8-7 on page 481
cable, fuser power supply	RG5-6827-000CN	Table 8-10 on page 487
cable, intermediate	RG5-6826-000CN	Table 8-10 on page 487
cable, left side	RG5-6818-000CN	Table 8-6 on page 479
cable, paper size	RG5-6821-000CN	Table 8-13 on page 493
cable, pickup unit	RG5-6829-000CN	Table 8-9 on page 485
cable, upper crossmember 5550 only	RG5-7687-000CN	Table 8-18 on page 503
cable, upper crossmember, 5500 only	RG5-6823-000CN	Table 8-18 on page 503
cam/gear, 66T	RS7-0302-000CN	Table 8-8 on page 483
cartridge inlet assembly	RG5-6726-000CN	Table 8-12 on page 491
cassette (Tray 2)	RG5-6647-150CN	Table 8-19 on page 505
cassette sensor PCB	RG5-6807-000CN	Table 8-3 on page 473
cassette sensor PCB	RG5-6807-000CN	Table 8-20 on page 509
cassette, 500-sheet feeder	RG5-6770-140CN	Table 8-25 on page 527
cassette, 500-sheet feeder (see Figure 8-29. 500-sheet paper feeder cassette (1 of 2))	RG5-6770-140CN	Table 8-23 on page 521
clutch	RH7-5329-000CN	Table 8-15 on page 497

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
clutch assembly, 500-sheet feeder	RG5-6761-000CN	Table 8-24 on page 523
color registration detection unit	RG5-6688-000CN	Table 8-8 on page 483
connector, 6-pin, J39	VS1-6760-006CN	Table 8-13 on page 493
contact assembly	RG5-6844-000CN	Table 8-12 on page 491
control panel assembly (100 - 127 v) control panel assembly (220 - 240 v) 5500 only	RG5-6781-030CN, RG5-6794-000CN	Table 8-9 on page 485
control panel assembly (100 - 127 v) control panel assembly (220 - 240 v), 5550 only	RG5-6781-030CN, RG5-6781-030CN	Table 8-9 on page 485
control panel overlay, 5500 only	See	Table 8-9 on page 485
control panel overlay, 5550 only	See	Table 8-9 on page 485
cover, cassette rear	RB2-9478-020CN	Table 8-7 on page 481
damper assembly	RG5-6786-000CN	Table 8-6 on page 479
DC controller PCB, 5500 only	RG5-6850-070CN	Table 8-3 on page 473
DC controller PCB, 5500 only	RG5-6850-070CN	Table 8-6 on page 479
DC controller PCB, 5500 only	RG5-6850-070CN	Table 8-9 on page 485
DC controller PCB, 5500 only	RG5-6850-070CN	Table 8-10 on page 487
DC controller PCB, 5500 only	RG5-6850-070CN	Table 8-11 on page 489
DC controller PCB, 5550 only	RG5-7684-000CN	Table 8-3 on page 473
DC controller PCB, 5550 only	RG5-7684-000CN	Table 8-6 on page 479
DC controller PCB, 5550 only	RG5-7684-000CN	Table 8-9 on page 485
DC controller PCB, 5550 only	RG5-7684-000CN	Table 8-10 on page 487
DC controller PCB, 5550 only	RG5-7684-000CN	Table 8-11 on page 489
disengaging drive assembly	RG5-6719-000CN	Table 8-6 on page 479
disengaging drive assembly	RG5-6719-000CN	Table 8-17 on page 501
disengaging plate assembly	RG5-6742-000CN	Table 8-6 on page 479
drum drive assembly (black)	RG5-7725-000CN (black)	Table 8-16 on page 499
drum drive assembly (cyan/magenta)	RG5-7723-000CN (cyan/magenta)	Table 8-16 on page 499

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
drum drive assembly (yellow)	RG5-7724- 000CN (yellow)	Table 8-16 on page 499
drum drive assembly, black	RG5-7725-000CN	Table 8-6 on page 479
drum drive assembly, cyan/magenta	RG5-7723-000CN	Table 8-6 on page 479
drum drive assembly, cyan/magenta	RG5-7723-000CN	Table 8-6 on page 479
drum drive assembly, yellow	RG5-7724-000CN	Table 8-6 on page 479
drum grounding assembly	RG5-6720-030CN	Table 8-6 on page 479
e-label antenna assembly	RG5-6728-000CN	Table 8-10 on page 487
E-label memory controller PCB	RG5-6803-000CN	Table 8-3 on page 473
E-label memory controller PCB	RG5-6803-000CN	Table 8-9 on page 485
ETB assembly	RG5-7737-000CN	Table 8-8 on page 483
ETB assembly	RG5-7737-000CN (new), C9656-69001 (exchange)	Table 8-21 on page 513
fan, cartridge	RH7-1526-000CN	Table 8-9 on page 485
fan, formatter	RH7-1491-000CN	Table 8-9 on page 485
fan, power supply	RH7-1491-000CN	Table 8-12 on page 491
Filter, left side	RB2-9378-000CN	Table 8-4 on page 475
Filter, rear	RB2-9379-000CN	Table 8-4 on page 475
Firmware DIMM, 5500 only	C9156-67910	Table 8-3 on page 473
Formatter (duplex), 5500 only	C9661-69002 (exchange), C9661-67902 (new)	Table 8-3 on page 473
Formatter (simplex), 5500 only	C9660-69011 (exchange), C9660-67911 (new)	Table 8-3 on page 473
Formatter assembly, 5550 only, simplex/duplex	Q3713-69001 (exchange), Q3713-67902 (new)	Table 8-3 on page 473
frame assembly, lower left	RG5-6672-040CN	Table 8-13 on page 493
frame assembly, lower right	RG5-6673-000CN	Table 8-13 on page 493
Front cover assembly	RG5-6777-120CN	Table 8-5 on page 477
fuse, 250 v, 20 amp (100 - 127 v) fuse, 250 v, 4 amp (220 - 240 v)	VD7-1732-002CN, VD7-0644-001CN	Table 8-7 on page 481

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
fuse, 250 v, 8 amp (110 and 220 v)	VD7-0648-001CN	Table 8-7 on page 481
fuser (100 - 127 v), 5500 only fuser (220 - 240 v), 5500 only	C9656-69012 (exchange), C9656-69002 (exchange)	Table 8-8 on page 483
fuser (100 - 127 v), 5550 only fuser (220 - 240 v), 5550 only	Q3984-69001 (exchange), Q3985-69001 (exchange)	Table 8-8 on page 483
fuser assembly, 5500 only	RG5-6848-150CN (110 volt, new), C9656-69016 (110 volt, exchange), RG5-6701-000CN (220 volt, new), C9656-69005 (220 volt, exchange)	Table 8-22 on page 517
fuser assembly, 5550 only	RG5-7691-000CN (110 volt, new), Q3984-69001 (110 volt, exchange), RG5-7692-000CN (220 volt, new), Q3985-69001 (220 volt, exchange)	Table 8-22 on page 517
fuser connector mount assembly, 5500 only	RG5-6734-000CN	Table 8-10 on page 487
fuser connector mount assembly, 5550 only	RG5-7727-000CN	Table 8-10 on page 487
fuser drive assembly, 5500 only	RG5-6714-000CN	Table 8-6 on page 479
fuser drive assembly, 5500 only	RG5-6714-000CN	Table 8-18 on page 503
fuser drive assembly, 5550 only	RG5-7700-000CN	Table 8-6 on page 479
fuser drive assembly, 5550 only	RG5-7700-000CN	Table 8-18 on page 503
fuser power supply (100 - 127 v) fuser power supply (220 - 240 v)	RG5-6801-000CN, RG5-6802-000CN	Table 8-10 on page 487
Fuser power supply PCB	RG5-6801-000CN (100 - 127 volt), RG5-6802-000CN (220 - 240 volt)	Table 8-3 on page 473
gear, 17T	RS7-0323-000CN	Table 8-6 on page 479
gear, 200T	RS7-0320-000CN	Table 8-6 on page 479
gear, 200T	RS7-0321-000CN	Table 8-6 on page 479
gear, 200T	RS7-0320-000CN	Table 8-6 on page 479

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
gear, 200T	RS7-0321-000CN	Table 8-6 on page 479
gear, 36T	RS7-0326-000CN	Table 8-11 on page 489
gear, pressure, left	RB2-9150-000CN	Table 8-8 on page 483
gear, pressure, right	RB2-9151-000CN	Table 8-8 on page 483
guide, cartridge, left lower	RB2-9390-000CN	Table 8-11 on page 489
guide, cartridge, left upper	RB2-9391-000CN	Table 8-11 on page 489
guide, cartridge, right lower	RB2-9392-000CN	Table 8-11 on page 489
guide, cartridge, right upper	RB2-9393-000CN	Table 8-11 on page 489
high-voltage PCB	RG5-6800-000CN	Table 8-10 on page 487
High-voltage power supply PCB	RG5-6800-000CN	Table 8-3 on page 473
hinge, one-way	RB2-9152-000CN	Table 8-8 on page 483
HVT terminal assembly	RG5-6725-000CN	Table 8-10 on page 487
I/O daughter card, 5500 only	C9144-60001	Table 8-3 on page 473
laser/scanner assembly, 5500 only	RG5-6736-000CN	Table 8-11 on page 489
laser/scanner assembly, 5550 only	RG5-7681--000CN	Table 8-11 on page 489
Left cover assembly	RG5-6782-000CN	Table 8-4 on page 475
lever	RF5-3898-000CN	Table 8-10 on page 487
lever, interlock	RB2-9358-020CN	Table 8-8 on page 483
lever, test print	RB2-9350-000CN	Table 8-9 on page 485
lifter drive assembly	RG5-6676-000CN	Table 8-13 on page 493
lifter drive assembly	RG5-6665-000CN	Table 8-20 on page 509
lifter drive unit, 500-sheet feeder	RG5-6753-030CN	Table 8-24 on page 523
lifter drive unit, 500-sheet feeder	RG5-6753-000CN	Table 8-26 on page 531
lifter drive unit, 500-sheet feeder (see Figure 8-31. 500-sheet paper feeder lifter drive assembly)	RG5-6753-030CN	Table 8-23 on page 521

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
link arm assembly, MP tray, right	RG5-6675-000CN	Table 8-13 on page 493
link, MP tray, left	RB2-9066-000CN	Table 8-13 on page 493
motor, 500-sheet feeder	RH7-1524-000CN	Table 8-24 on page 523
motor, M5, fuser	RH7-1617-000CN	Table 8-18 on page 503
motor, M6, ETB	RH7-1618-000CN	Table 8-21 on page 513
motor, PM1, developing disengaging	RH7-1524-000CN	Table 8-17 on page 501
motor, PM2, pickup motor 5500 only	RH7-1523-000CN	Table 8-15 on page 497
motor, PM2, pickup motor 5550 only	RH7-1619-000CN	Table 8-15 on page 497
Multi-purpose tray assembly	RG5-6780-070CN	Table 8-5 on page 477
multi-purpose tray sensor PCB	RG5-6806-000CN	Table 8-3 on page 473
multi-purpose tray sensor PCB	RG5-6806-000CN	Table 8-20 on page 509
optional 500-sheet paper feeder and Tray 3 (or Tray 4) assembly	C7130-67901	Table 8-23 on page 521
paper feeder cable	RG5-6836-000CN	Table 8-13 on page 493
paper feeder PCB 5500 only	RG5-6772-000CN	Table 8-24 on page 523
paper feeder PCB 5550 only	RG5-7718-000CN	Table 8-24 on page 523
paper pickup assembly, 5500 only	RG5-6670-110CN	Table 8-9 on page 485
paper pickup assembly, 5500 only	RG5-6670-110CN	Table 8-20 on page 509
paper pickup assembly, 5550 only	RG5-7709-000CN	Table 8-9 on page 485
paper pickup assembly, 5550 only	RG5-7709-000CN	Table 8-20 on page 509
paper pickup drive assembly, 5500 only	RG5-6661-070CN	Table 8-15 on page 497
paper pickup drive assembly, 5550 only	RG5-7711-000CN	Table 8-15 on page 497
paper pickup drive assy, 5500 only	RG5-6661-070CN	Table 8-20 on page 509

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
paper pickup drive unit, 5550 only	RG5-7711-000CN	Table 8-20 on page 509
paper pickup unit, 500-sheet feeder	RG5-6748-050CN	Table 8-24 on page 523
paper pickup unit, 500-sheet feeder	RG5-6748-050CN	Table 8-27 on page 533
paper pickup unit, 500-sheet feeder (see Figure 8-32. 500-sheet paper feeder paper pickup assembly)	RG5-6748-050CN	Table 8-23 on page 521
paper size detection assembly, 500-sheet feeder	RG5-6769-000CN	Table 8-24 on page 523
photo interrupter	WG8-5362-000CN	Table 8-12 on page 491
photo interrupter, TLP 1241	WG8-5362-000CN	Table 8-11 on page 489
photo interrupter, TLP 1241	WG8-5362-000CN	Table 8-20 on page 509
photo interrupter, TLP1241	WG8-5362-000CN	Table 8-17 on page 501
photo interrupter, TLP1241	WG8-5362-000CN	Table 8-18 on page 503
plate, drive release	RB2-9359-000CN	Table 8-6 on page 479
power supply assembly (100 - 127 v) power supply assembly (220 - 240 v)	RG5-6808-060CN, RG5-6809-060CN	Table 8-7 on page 481
Rear cover	RG5-9485-000CN	Table 8-4 on page 475
Rear top cover assembly, 5500 only	RG5-6779-000CN	Table 8-4 on page 475
Rear top cover assembly, 5550 only	RG5-7732-000CN	Table 8-4 on page 475
Right cover assembly	RG5-6783-020CN	Table 8-4 on page 475
rod, spring	RB2-8213-000CN	Table 8-13 on page 493
roller assembly, MP tray pickup	RG9-1529-000CN	Table 8-19 on page 505
roller, cassette feed	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	Table 8-20 on page 509
roller, cassette pickup	RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	Table 8-20 on page 509

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
roller, feed	RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit)	Table 8-27 on page 533
roller, pickup	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit)	Table 8-27 on page 533
roller, separation	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit), see note below	Table 8-19 on page 505
roller, separation	RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) See second note below.	Table 8-25 on page 527
screw, M3x10, with washer	XA9-1162-000CN	Table 8-6 on page 479
screw, M3x6, TP	XA9-1329-000CN	Table 8-6 on page 479
screw, M3x8	XA9-1330-000CN	Table 8-4 on page 475
screw, security	RS5-9175-000CN	Table 8-24 on page 523
sensor and bracket assembly	RG5-6715-000CN	Table 8-12 on page 491
sensor flag assembly	RG5-6842-040CN	Table 8-22 on page 517
separation pad	RF5-3865-000CN	Table 8-19 on page 505
solenoid	RH7-5330-000CN	Table 8-15 on page 497
spring, scanner support	RB2-8246-000CN	Table 8-7 on page 481
spring, tension	RS6-2626-000CN	Table 8-8 on page 483
spring, tension	RS6-2632-000CN	Table 8-8 on page 483
static discharge cleaning brush	RB2-9561-030CN	Table 8-14 on page 495
static discharge comb KH, 5550 only	Q3713-67901	Table 8-14 on page 495
static discharge comb, 5500 only	RG5-6846-000CN	Table 8-14 on page 495
static discharge PCB	RG5-6810-000CN	Table 8-3 on page 473
static discharge PCB assembly	RG5-6845-000CN	Table 8-14 on page 495

Table 8-28. Alphabetical parts list (continued)

Description	Part number	Table and page
support, left, ETB	RB2-9147-000CN	Table 8-8 on page 483
support, right hinge	RB2-9475-000CN	Table 8-6 on page 479
support, right, ETB	RB2-9146-000CN	Table 8-8 on page 483
switch, cover safety	WC4-5188-000CN	Table 8-12 on page 491
toner sensor PCB	RG5-6805-000CN	Table 8-3 on page 473
toner sensor PCB	RG5-6805-000CN	Table 8-10 on page 487
Top cover assembly	RG5-6778-060CN	Table 8-5 on page 477

Numerical parts list

Table 8-29. Numerical parts list

Part number	Description	Table and page
C7130-67901	optional 500-sheet paper feeder and Tray 3 (or Tray 4) assembly	Table 8-23 on page 521
C9144-60001	I/O daughter card, 5500 only	Table 8-3 on page 473
C9156-67910	Firmware DIMM, 5500 only	Table 8-3 on page 473
C9656-69012 (exchange), C9656-69002 (exchange)	fuser (100 - 127 v), 5500 only fuser (220 - 240 v), 5500 only	Table 8-8 on page 483
C9660-69011 (exchange), C9660-67911 (new)	Formatter (simplex), 5500 only	Table 8-3 on page 473
C9661-69002 (exchange), C9661-67902 (new)	Formatter (duplex), 5500 only	Table 8-3 on page 473
Q3713-67901	static discharge comb KH, 5550 only	Table 8-14 on page 495
Q3713-69001 (exchange), Q3713-67902 (new)	Formatter assembly, 5550 only, simplex/duplex	Table 8-3 on page 473
Q3984-69001 (exchange), Q3985-69001 (exchange)	fuser (100 - 127 v), 5550 only fuser (220 - 240 v), 5550 only	Table 8-8 on page 483
RB2-8213-000CN	rod, spring	Table 8-13 on page 493
RB2-8246-000CN	spring, scanner support	Table 8-7 on page 481
RB2-9066-000CN	link, MP tray, left	Table 8-13 on page 493
RB2-9145-000CN	brush, cleaning	Table 8-9 on page 485
RB2-9146-000CN	support, right, ETB	Table 8-8 on page 483
RB2-9147-000CN	support, left, ETB	Table 8-8 on page 483
RB2-9150-000CN	gear, pressure, left	Table 8-8 on page 483
RB2-9151-000CN	gear, pressure, right	Table 8-8 on page 483
RB2-9152-000CN	hinge, one-way	Table 8-8 on page 483
RB2-9350-000CN	lever, test print	Table 8-9 on page 485
RB2-9358-020CN	lever, interlock	Table 8-8 on page 483
RB2-9359-000CN	plate, drive release	Table 8-6 on page 479
RB2-9378-000CN	Filter, left side	Table 8-4 on page 475

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RB2-9379-000CN	Filter, rear	Table 8-4 on page 475
RB2-9390-000CN	guide, cartridge, left lower	Table 8-11 on page 489
RB2-9391-000CN	guide, cartridge, left upper	Table 8-11 on page 489
RB2-9392-000CN	guide, cartridge, right lower	Table 8-11 on page 489
RB2-9393-000CN	guide, cartridge, right upper	Table 8-11 on page 489
RB2-9475-000CN	support, right hinge	Table 8-6 on page 479
RB2-9478-020CN	cover, cassette rear	Table 8-7 on page 481
RB2-9561-030CN	static discharge cleaning brush	Table 8-14 on page 495
RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit)	roller, pickup	Table 8-27 on page 533
RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) See second note below.	roller, separation	Table 8-25 on page 527
RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	roller, cassette feed	Table 8-20 on page 509
RF5-3338-000CN (single roller), RY7-5097-000CN (roller kit), see note below	roller, separation	Table 8-19 on page 505
RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit)	roller, feed	Table 8-27 on page 533
RF5-3340-000CN (single roller), RY7-5097-000CN (roller kit) see second note on the next page	roller, cassette pickup	Table 8-20 on page 509
RF5-3865-000CN	separation pad	Table 8-19 on page 505
RF5-3898-000CN	lever	Table 8-10 on page 487
RG5-6647-150CN	cassette (Tray 2)	Table 8-19 on page 505
RG5-6661-070CN	paper pickup drive assembly, 5500 only	Table 8-15 on page 497
RG5-6661-070CN	paper pickup drive assy, 5500 only	Table 8-20 on page 509

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RG5-6665-000CN	lifter drive assembly	Table 8-20 on page 509
RG5-6670-110CN	paper pickup assembly, 5500 only	Table 8-9 on page 485
RG5-6670-110CN	paper pickup assembly, 5500 only	Table 8-20 on page 509
RG5-6672-040CN	frame assembly, lower left	Table 8-13 on page 493
RG5-6673-000CN	frame assembly, lower right	Table 8-13 on page 493
RG5-6675-000CN	link arm assembly, MP tray, right	Table 8-13 on page 493
RG5-6676-000CN	lifter drive assembly	Table 8-13 on page 493
RG5-6688-000CN	color registration detection unit	Table 8-8 on page 483
RG5-6714-000CN	fuser drive assembly, 5500 only	Table 8-6 on page 479
RG5-6714-000CN	fuser drive assembly, 5500 only	Table 8-18 on page 503
RG5-6715-000CN	sensor and bracket assembly	Table 8-12 on page 491
RG5-6719-000CN	disengaging drive assembly	Table 8-6 on page 479
RG5-6719-000CN	disengaging drive assembly	Table 8-17 on page 501
RG5-6720-030CN	drum grounding assembly	Table 8-6 on page 479
RG5-6725-000CN	HVT terminal assembly	Table 8-10 on page 487
RG5-6726-000CN	cartridge inlet assembly	Table 8-12 on page 491
RG5-6728-000CN	e-label antenna assembly	Table 8-10 on page 487
RG5-6734-000CN	fuser connector mount assembly, 5500 only	Table 8-10 on page 487
RG5-6736-000CN	laser/scanner assembly, 5500 only	Table 8-11 on page 489
RG5-6742-000CN	disengaging plate assembly	Table 8-6 on page 479
RG5-6748-050CN	paper pickup unit, 500-sheet feeder (see Figure 8-32. 500-sheet paper feeder paper pickup assembly)	Table 8-23 on page 521
RG5-6748-050CN	paper pickup unit, 500-sheet feeder	Table 8-24 on page 523
RG5-6748-050CN	paper pickup unit, 500-sheet feeder	Table 8-27 on page 533
RG5-6753-000CN	lifter drive unit, 500-sheet feeder	Table 8-26 on page 531
RG5-6753-030CN	lifter drive unit, 500-sheet feeder (see Figure 8-31. 500-sheet paper feeder lifter drive assembly)	Table 8-23 on page 521
RG5-6753-030CN	lifter drive unit, 500-sheet feeder	Table 8-24 on page 523
RG5-6761-000CN	clutch assembly, 500-sheet feeder	Table 8-24 on page 523
RG5-6769-000CN	paper size detection assembly, 500-sheet feeder	Table 8-24 on page 523
RG5-6770-140CN	cassette, 500-sheet feeder (see Figure 8-29. 500-sheet paper feeder cassette (1 of 2))	Table 8-23 on page 521
RG5-6770-140CN	cassette, 500-sheet feeder	Table 8-25 on page 527

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RG5-6772-000CN	paper feeder PCB 5500 only	Table 8-24 on page 523
RG5-6777-120CN	Front cover assembly	Table 8-5 on page 477
RG5-6778-060CN	Top cover assembly	Table 8-5 on page 477
RG5-6779-000CN	Rear top cover assembly, 5500 only	Table 8-4 on page 475
RG5-6780-070CN	Multi-purpose tray assembly	Table 8-5 on page 477
RG5-6781-030CN, RG5-6781-030CN	control panel assembly (100 - 127 v) control panel assembly (220 - 240 v), 5550 only	Table 8-9 on page 485
RG5-6781-030CN, RG5-6794-000CN	control panel assembly (100 - 127 v) control panel assembly (220 - 240 v) 5500 only	Table 8-9 on page 485
RG5-6782-000CN	Left cover assembly	Table 8-4 on page 475
RG5-6783-020CN	Right cover assembly	Table 8-4 on page 475
RG5-6786-000CN	damper assembly	Table 8-6 on page 479
RG5-6800-000CN	High-voltage power supply PCB	Table 8-3 on page 473
RG5-6800-000CN	high-voltage PCB	Table 8-10 on page 487
RG5-6801-000CN (100 - 127 volt), RG5-6802-000CN (220 - 240 volt)	Fuser power supply PCB	Table 8-3 on page 473
RG5-6801-000CN, RG5-6802-000CN	fuser power supply (100 - 127 v) fuser power supply (220 - 240 v)	Table 8-10 on page 487
RG5-6803-000CN	E-label memory controller PCB	Table 8-3 on page 473
RG5-6803-000CN	E-label memory controller PCB	Table 8-9 on page 485
RG5-6805-000CN	toner sensor PCB	Table 8-3 on page 473
RG5-6805-000CN	toner sensor PCB	Table 8-10 on page 487
RG5-6806-000CN	multi-purpose tray sensor PCB	Table 8-3 on page 473
RG5-6806-000CN	multi-purpose tray sensor PCB	Table 8-20 on page 509
RG5-6807-000CN	cassette sensor PCB	Table 8-3 on page 473
RG5-6807-000CN	cassette sensor PCB	Table 8-20 on page 509
RG5-6808-060CN, RG5-6809-060CN	power supply assembly (100 - 127 v) power supply assembly (220 - 240 v)	Table 8-7 on page 481
RG5-6810-000CN	static discharge PCB	Table 8-3 on page 473
RG5-6815-000CN	cable, AC	Table 8-10 on page 487
RG5-6816-000CN	cable, DC	Table 8-7 on page 481
RG5-6818-000CN	cable, left side	Table 8-6 on page 479
RG5-6820-000CN	cable, fan	Table 8-9 on page 485
RG5-6821-000CN	cable, paper size	Table 8-13 on page 493

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RG5-6823-000CN	cable, upper crossmember, 5500 only	Table 8-18 on page 503
RG5-6826-000CN	cable, intermediate	Table 8-10 on page 487
RG5-6827-000CN	cable, fuser power supply	Table 8-10 on page 487
RG5-6829-000CN	cable, pickup unit	Table 8-9 on page 485
RG5-6834-000CN	cable, formatter interface	Table 8-7 on page 481
RG5-6836-000CN	paper feeder cable	Table 8-13 on page 493
RG5-6842-040CN	sensor flag assembly	Table 8-22 on page 517
RG5-6844-000CN	contact assembly	Table 8-12 on page 491
RG5-6845-000CN	static discharge PCB assembly	Table 8-14 on page 495
RG5-6846-000CN	static discharge comb, 5500 only	Table 8-14 on page 495
RG5-6848-150CN (110 volt, new), C9656-69016 (110 volt, exchange), RG5-6701-000CN (220 volt, new), C9656-69005 (220 volt, exchange)	fuser assembly, 5500 only	Table 8-22 on page 517
RG5-6850-070CN	DC controller PCB, 5500 only	Table 8-3 on page 473
RG5-6850-070CN	DC controller PCB, 5500 only	Table 8-6 on page 479
RG5-6850-070CN	DC controller PCB, 5500 only	Table 8-9 on page 485
RG5-6850-070CN	DC controller PCB, 5500 only	Table 8-10 on page 487
RG5-6850-070CN	DC controller PCB, 5500 only	Table 8-11 on page 489
RG5-7681--000CN	laser/scanner assembly, 5550 only	Table 8-11 on page 489
RG5-7684-000CN	DC controller PCB, 5550 only	Table 8-3 on page 473
RG5-7684-000CN	DC controller PCB, 5550 only	Table 8-6 on page 479
RG5-7684-000CN	DC controller PCB, 5550 only	Table 8-9 on page 485
RG5-7684-000CN	DC controller PCB, 5550 only	Table 8-10 on page 487
RG5-7684-000CN	DC controller PCB, 5550 only	Table 8-11 on page 489
RG5-7687-000CN	cable, upper crossmember 5550 only	Table 8-18 on page 503
RG5-7691-000CN (110 volt, new), Q3984-69001 (110 volt, exchange), RG5-7692-000CN (220 volt, new), Q3985-69001 (220 volt, exchange)	fuser assembly, 5550 only	Table 8-22 on page 517
RG5-7700-000CN	fuser drive assembly, 5550 only	Table 8-6 on page 479

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RG5-7700-000CN	fuser drive assembly, 5550 only	Table 8-18 on page 503
RG5-7709-000CN	paper pickup assembly, 5550 only	Table 8-9 on page 485
RG5-7709-000CN	paper pickup assembly, 5550 only	Table 8-20 on page 509
RG5-7711-000CN	paper pickup drive assembly, 5550 only	Table 8-15 on page 497
RG5-7711-000CN	paper pickup drive unit, 5550 only	Table 8-20 on page 509
RG5-7718-000CN	paper feeder PCB 5550 only	Table 8-24 on page 523
RG5-7723-000CN	drum drive assembly, cyan/magenta	Table 8-6 on page 479
RG5-7723-000CN	drum drive assembly, cyan/magenta	Table 8-6 on page 479
RG5-7723-000CN (cyan/magenta)	drum drive assembly (cyan/magenta)	Table 8-16 on page 499
RG5-7724- 000CN (yellow)	drum drive assembly (yellow)	Table 8-16 on page 499
RG5-7724-000CN	drum drive assembly, yellow	Table 8-6 on page 479
RG5-7725-000CN	drum drive assembly, black	Table 8-6 on page 479
RG5-7725-000CN (black)	drum drive assembly (black)	Table 8-16 on page 499
RG5-7727-000CN	fuser connector mount assembly, 5550 only	Table 8-10 on page 487
RG5-7732-000CN	Rear top cover assembly, 5550 only	Table 8-4 on page 475
RG5-7737-000CN	ETB assembly	Table 8-8 on page 483
RG5-7737-000CN (new), C9656-69001 (exchange)	ETB assembly	Table 8-21 on page 513
RG5-9485-000CN	Rear cover	Table 8-4 on page 475
RG9-1529-000CN	roller assembly, MP tray pickup	Table 8-19 on page 505
RH2-5510-000CN	cable, flat	Table 8-7 on page 481
RH2-5511-000CN	cable, flat	Table 8-9 on page 485
RH7-1491-000CN	fan, formatter	Table 8-9 on page 485
RH7-1491-000CN	fan, power supply	Table 8-12 on page 491
RH7-1523-000CN	motor, PM2, pickup motor 5500 only	Table 8-15 on page 497
RH7-1524-000CN	motor, PM1, developing disengaging	Table 8-17 on page 501
RH7-1524-000CN	motor, 500-sheet feeder	Table 8-24 on page 523
RH7-1526-000CN	fan, cartridge	Table 8-9 on page 485
RH7-1617-000CN	motor, M5, fuser	Table 8-18 on page 503
RH7-1618-000CN	motor, M6, ETB	Table 8-21 on page 513

Table 8-29. Numerical parts list (continued)

Part number	Description	Table and page
RH7-1619-000CN	motor, PM2, pickup motor 5550 only	Table 8-15 on page 497
RH7-5329-000CN	clutch	Table 8-15 on page 497
RH7-5330-000CN	solenoid	Table 8-15 on page 497
RS5-9175-000CN	screw, security	Table 8-24 on page 523
RS6-2626-000CN	spring, tension	Table 8-8 on page 483
RS6-2632-000CN	spring, tension	Table 8-8 on page 483
RS7-0302-000CN	cam/gear, 66T	Table 8-8 on page 483
RS7-0320-000CN	gear, 200T	Table 8-6 on page 479
RS7-0320-000CN	gear, 200T	Table 8-6 on page 479
RS7-0321-000CN	gear, 200T	Table 8-6 on page 479
RS7-0321-000CN	gear, 200T	Table 8-6 on page 479
RS7-0323-000CN	gear, 17T	Table 8-6 on page 479
RS7-0326-000CN	gear, 36T	Table 8-11 on page 489
See	control panel overlay, 5500 only	Table 8-9 on page 485
See	control panel overlay, 5550 only	Table 8-9 on page 485
VD7-0648-001CN	fuse, 250 v, 8 amp (110 and 220 v)	Table 8-7 on page 481
VD7-1732-002CN, VD7-0644-001CN	fuse, 250 v, 20 amp (100 - 127 v) fuse, 250 v, 4 amp (220 - 240 v)	Table 8-7 on page 481
VS1-6760-006CN	connector, 6-pin, J39	Table 8-13 on page 493
WC4-5188-000CN	switch, cover safety	Table 8-12 on page 491
WG8-5362-000CN	photo interrupter, TLP 1241	Table 8-11 on page 489
WG8-5362-000CN	photo interrupter	Table 8-12 on page 491
WG8-5362-000CN	photo interrupter, TLP1241	Table 8-17 on page 501
WG8-5362-000CN	photo interrupter, TLP1241	Table 8-18 on page 503
WG8-5362-000CN	photo interrupter, TLP 1241	Table 8-20 on page 509
XA9-1162-000CN	screw, M3x10, with washer	Table 8-6 on page 479
XA9-1329-000CN	screw, M3x6, TP	Table 8-6 on page 479
XA9-1330-000CN	screw, M3x8	Table 8-4 on page 475

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